

HAND BOOK

on

Opportunities of R&D Funding

Sponsored Research & Academic Research

An Initiative of

NEW HORIZON COLLEGE OF ENGINEERING

Bangalore

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FOREWORD

We express our deep sense of gratitude to **Dr. Mohan Manghnani**, Chairman of New Horizon Educational Institutions and **Dr. Manjunatha**, Principal of New Horizon College of Engineering, Bangalore for their constant-continuous encouragement, valuable criticisms and pleasant relationship during the course of promoting Sponsored Research, Academic Research and Consultancy Projects at New Horizon College of Engineering, Bangalore.

We are greatly indebted to **Padmashri Prof. R. M. Vasagam**, Eminent Scientist, ISRO, Former Vice-Chancellor of Anna University and Dr.MGR University, **Dr. Mylswamy Annadurai**, Director, ISRO Satellite Centre, **Dr. L. V. Muralikrishna Reddy**, National President (2014-15), The Institution of Engineers (India) for their inspiration and sparing their valuable time with us and also for their suggestions to validate the findings of many of our projects. We would like to express our gratitude to all the office bearers of National Design and Research Foundation for their unstinted support towards interdisciplinary and multidisciplinary projects.

We would like to thank the editorial team of for helping us in the process of review the manuscript, selection and editing of this "Hand Book". We also would like to thank **Dr. S. Ramachandran**, Founder of Airwalk Publications, Chennai for enabling us to publish this "Hand Book On R&D".

The various facilities, proactive initiatives to promote research (both sponsored & academic research) and consultancy are unparalleled at NHCE. The vibrant R&D culture fosters innovative spirit and kindle the young minds at the campus under able guidance and mentorship of motivated faculty members at all the departments have carved the niche place in India for NHCE. The support provided by our Chairman, Principal, Deans, Heads of Departments, Professors and Senior Faculty Members in the process of promotion of research, is greatly acknowledged.

Here an attempt has been made to showcase the various opportunities available for sponsored research funding (grants) at national and international level agencies' and also the compilation of funding formats, thrust areas etc to sensitize/strengthen the R&D activities at engineering colleges are highlighted in this hand book. Adequate emphasis were given to academic research (PhD/MS-By Research), Procedures, Regulations, Guidelines, Calendar for PhD Scholars, Manual for Preparation of Thesis, Post Doctoral Degree (DSc/DLitt) Procedures, Publication Tips, Similarity Index, Dispel the Myths and Realities of Impact Factor, Over View of Plagiarism Detecting Software, IPR and Patents' Filling Formats etc in the hand book. The hand book also contains the DVD which provides the soft copy of the hand book along with appropriate hyper links for the direct access to the funding agencies' websites for ready reference/usages. In the era of knowledge economy, NHCE strives hard to bring in frugal innovation and encourages the young researchers/students to innovate and file highest number of patents to galvanize the culture of creativity and innovation at every campus in India.

R&D Facilities at NHCE

- Nine University Approved Research Centres
- R&D Cell organizes various Research Activities
- Each Department has a Research Coordinators
- High Bandwidth (200mbps) Internet Connectivity & Wi-Fi Facility
- 10% of Institution's Budget is Allocated Towards Supporting Research Activities
- Nokia Mobile Innovation Lab
- Senior Faculty Members act as Research Mentors of Junior Faculty Members
- Centre for Intelligent Imaging Solutions
- Centre of Excellence for Motion Capture
- Centre of Excellence for Edufotainment on Wheels
- Design Studio and Product Development Centre
- Technology Business Incubation Centre
- Centre for Innovations, Creativity and IPR
- ERP Centre of Excellence
- Centre of Excellence of Digital Learning Resources
- Society for the Promotion of Innovation, Creativity and Entrepreneurship (SPICE Club)

Sponsored Research Grants & Consultancy Grants for Last 4 Years

Nature of Grant	2015-16	2014-15	2013-14	2012-13	Amount
Research Projects	66,79,000.00	11,41,000.00	42,05,876.00	29,31,000.00	1,49,56,876.00
Consultancy Projects	34,35,000.00	28,88,980.00	25,18,400.00	-	88,42,380.00
Total	1,01,14,000.00	40,29,980.00	67,24,276.00	29,31,000.00	2,37,99,256.00

Major Innovative Projects Executed/Proposed and Patents Granted/Filled at NHCE	Promotion of Research and Resource Mobilization for Research
<i>Multipurpose Expandable Auditorium On Wheels</i>	<i>9 Depts. are Recognized as R&D Centres under VTU for PhD</i>
<i>Motion Simulator (6DoF)-Hydraulic System</i>	<i>R&D Cell headed by Dean – Research & Development</i>
<i>Motion Simulator (3DoF)-Pneumatic System</i>	<i>Faculty Members are Encouraged to Take-Up Research Work and Publish Papers</i>
<i>Inflatable Auditorium On Wheels</i>	<i>Best Research Project Scheme</i>
<i>7D+ Simulator with Largest 3D Screen (16') On Wheels</i>	<i>Industry Institute Interaction to help the identification of research areas</i>
<i>Low Bed Trailer Multipurpose Auditorium with Wings Opening On Wheels</i>	<i>Incentives for Patent Filing/Paper Publication and/or Presentation</i>
<i>Unisex Convertible Bicycle Frames</i>	<i>Higher Studies Leave Benefits</i>
<i>Conservation of Fresh Water through Garland of Inter-Connected Tanks Along the Coast of India: Alternative to Inter-Linking of Rivers</i>	<i>College has Received Grants from Various Research Agencies Towards Sponsored research and/or Consultancy Projects</i>
<i>Design Modification of 3Tier Compartment of Railways to Increase the Berths from 72 to 90 with Improved Comfort and 2 Walkways</i>	<i>Increments in Salary when Faculty Upgrades Their Qualifications</i>
<i>Design and Development of Bio-Reactor</i>	<i>Felicitation on Completion of PhD</i>
<i>Design of Glass Cleaning Robot for High-rise Buildings</i>	<i>Reduction in Workload for Faculty Members Pursuing PhD</i>
<i>Development of Mobile Apps</i>	<i>Library Facility with resources like e-journals, print journal, magazines and periodicals, mobile app to use e-facilities</i>
<i>Motion Capture System</i>	<i>10% of Institution's Budget is Allocated Towards Supporting Research Activities</i>
<i>Intelligent Imaging System</i>	<i>Seed Funding for Research Projects</i>
<i>Conservation System for Cutting Fluids and Better Reuse</i>	<i>Incentives for Publications in National/International Journals</i>
<i>Design and Development of Dental Clinic On Wheels</i>	<i>Equipment and Research Facilities at the Departments are Utilized by Both Faculty Members and Students</i>
<i>Design and Development of Kitchen On Wheels</i>	<i>Faculty development program / training programs every semester</i>

We wish to thank all the faculty members of New Horizon College of Engineering for their motivation, encouragement and support rendered during the course of publication of hand book on R&D Funding Opportunities and Sponsored Research/Academic Research Programmes.

Dr. K. Gopalakrishnan
Dean (R&D)
Editor, Compendium of R&D Projects

New Horizon College of Engineering

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R&D VISION, MISSION AND OBJECTIVES
New Horizon College of Engineering
(NHCE)
Bangalore

I. VISION, MISSION AND OBJECTIVES

I.1 Vision

- a) *To sensitize faculty members, students & researchers about R&D initiatives of the NHCE.*
- b) *To initiate activities for setting-up of Patent Facilitation Centre, Technology Transfer Cell and to recognize and encourage original and novel research contributions, both from within the NHCE and outside, which is expected to add thrust to the Institution's R&D efforts.*
- c) *To initiate Mentoring Programmes, Internships and Incubation at NHCE.*

I.2 Mission

To produce high quality Under-Graduates & Post-Graduates in Engineering, Technology, Science, Humanities, Management and Allied Science with a sound theoretical and practical knowledge and civic responsibility, who can contribute effectively to the progress of the country and society in the years to come through their chosen profession.

To establish and develop research and extension activity in Engineering and Technology courses.

Goals and Objectives:

The Goals and Objectives include

- a) *To make the NHCE a worthy knowledge centre by developing research and extension activities in association with professional bodies/industries/research establishments;*
- b) *To create awareness among faculty members and students about the availability and access to research grants, funding formats etc and appropriately hand hold them to get such funds/grants;*
- c) *To development close collaboration with industry through exchange of personnel and undertaking consultancy projects;*
- d) *To improve a strong collaboration links with other academic and research institutions in the country and abroad;*
- e) *To sensitize/motivate the faculty members and students through structured training and inculcating the knowledge of theory of inventive problem solving in such way to adopt creative process of problem solving;*
- f) *To provide an education and learning experience of the highest quality and value to its students in the chosen disciplines;*
- g) *To prepare the students in attaining a comprehensive knowledge In order to face the global competition;*
- h) *To ensure the participation of students in various R&D or Design Competitions/Awards within India and Abroad*

I.3 Objectives

- *To create an environment for effective teaching-learning by encouraging the students and faculty to nurture the curiosity and scientific and research temper.*
- *To assist the process of Induction of highly qualified, talented, competent & motivated faculty and training & dedicated supporting the administrative staff*
- *Establishment of excellent academic research support facilities (laboratory, library, Internet, etc.)*

- Provide opportunities for continuous updating the knowledge of faculty through faculty interventions/exchanges from premier institutions and industries/R&D Labs
- Establishment of procedures and methodologies for regular monitoring and control of quality of all academic programmes
- Reforms in regulations and curriculum with greater flexibility to students
- Have strong linkage with industries/Professional Bodies
- Technology up-gradation, development and transfer
- Active participation of alumni in resource generation and planning and development
- Organising and participation of staff and students in in-house and outside training programs, seminars, conferences, workshops on continuous basis.
- Increase research and consultancy activity with options for incentives and encouragement to motivate staff and students to actively involve in research activities in collaboration with industry and R&D Centres
- Increase the number of continuing education programmes/MDPs for Industries
- Exchange of faculty and working personnel from industry
- Increase Institute-Industry interaction/Collaboration
- Entrepreneurship Development/Technology Business Incubation/startups
- Increased interaction with educational and other research establishments/ institutes.

1.4 Methodologies:

- Identify the particular areas of emerging technology/Inter-disciplinary/Multi-disciplinary Approach
- Identify the problems of particular industry/cluster/region
- SWOT Analysis (Examining of the existing faculty/facilities) for R&D activities
- Sensible Motivation Programmes to distinguish performers and non-performers among faculty members through financial/Non-financial Incentives
- Submit concrete proposals to funding agencies for necessary grant
- Establish/strengthen R&D facilities/Culture at the NHCE in collaboration with industries/professional bodies
- Develop more research-oriented labs and centres in association/support of Industries/Professional Bodies
- Involve students in innovative technology projects/Awards/Competitions
- Research & Development oriented interventions/programmes/education
- Create national/international collaborative programmes
- Networking among Institutions/Universities for resource and expertise sharing
- Improving in service conditions of faculty members and technical staff commensurate to that of the industry to attract best faculty & staff
- Introduction of award of merit, recognition and sabbatical leave to performing faculty and staff.

1.5 Output Indicators:

- Increase in research publication, patents and technology transfer to industry
- Increase in sponsored research projects and consultancy
- Increase at Ph.D. and post-doctoral research
- Increase in the network of eminent Scientists/Think Tanks to strengthen the R&D activities of

NHCE

- *Increase in state of art laboratories in cutting edge technologies with the support of industries/funding agencies*
- *Increase in national and international conferences of our own/in association with others*
- *Increase in qualified (minimum Ph.D.) and talented faculty.*
- *Substantial increase in the intake quality of students at UG/PG Programmes*
- *Class rooms and laboratories equipped with latest tools being used meaningfully*
- *Adjunct / Visiting faculty from the industry/R&D Labs/Professional Bodies*
- *Faculty Visit / training collaborative ventures with industry, research organizations and other academic institutions in India and abroad*
- *Increase in intake quality of students at M.E. & M.Tech. and Ph.D. level (restructuring the existing programmes & introducing new programmes)*
- *Increase in the departments and Centre of Excellence*
- *Increase in resource generation through alumni, consultancy, fee, etc.*
- *Increase in community services to payback to the society*
- *Increase in non-formal training to industry and other educational institute (Executive / Staff Development Programme)*
- *Lectures by distinguished professionals from industry and academic institute*
- *National and Global accreditation certification*
- *Establishment of industry sponsored Chairs*
- *Nurturing entrepreneurs by creating Technology Business incubators*
- *Exchange programmes at national and international level.*

**MoUs Signed by
New Horizon College of Engineering
Bangalore**

1. MOU with Intepat IP Services for Patents
2. MOU with Iolite Services (P) Ltd., for deploying the admissions and examinations software application
3. MOU with eFlow Gurukul Solutions Pvt., Ltd., for Software development, Software Solutions and Consultancy for Autonomous Stream Students
4. MOU with Sakra World Hospital for rendering services to the students and staff members at a discounted rate
5. MOU with Fourth Dimension for increasing the market reach of Department of Automobile Engineering
6. MOU with Sankalp Life Coaching Academy Pvt., Ltd., for conducting Personality & Soft Skills Development Program for the Students
7. MOU with People English for introducing a standardized International Testing System for English and to acquire Cambridge English Certifications for the Students
8. MOU with EConstruct Design & Build (P) Ltd., for Skill Development and Value Added Consultancy for the Students and Faculties of NHCE
9. MOU with SAPSPRING for imparting professional training to the Students
10. MOU with Eklakshya VLSI R & D Centre Pvt. Ltd., for the joint development and execution of Certified Short term courses and Long term courses in the domains of VLSI, Embedded Systems, Product Design etc.,
11. MOU with Robogenesis for conducting One Day Workshop based on PoV
12. MOU with Cranes Software International Limited for setting up of Analog Teaching Lab Setup
13. MOU with Knowledge Partner Technologies (P) Ltd., Chennai for Development of Collaborative Research Projects and Consultancy and Promotion of Technologies for Start-ups.
14. MOU with Scaltech Solutions Pvt. Ltd., for conducting Career Oriented program for the students
15. MOU with Capstone Business Simulation for the certification program for II Semester MBA Student
16. MOU with SAP R3 Training for the certification program for II Semester MBA Students
17. MOU with YURI GAGARIN STATE TECHNICAL UNIVERSITY OF SARATOV, RUSSIAN FEDERATION for Faculty Exchange.
18. MOU with DAFFODIL INTERNATIONAL UNIVERSITY - BANGLADESH for Joint Research Activities
19. MOU with BCP Associates for preparing the students to be equipped with the functions of "Labour Law Compliance Management"
20. MOU with CMC Limited for conducting several high end training programs to the students
21. MOU with Infosys on Campus Connect Program
22. MOU with Hi-Tech Engineers, Bangalore for Development of Collaborative Research Projects and Consultancy and Promotion of Technologies for Start-ups.
23. MOU with Palrecha Engineering Works, Mumbai for Development of Collaborative Research Projects and Consultancy and Promotion of Technologies for Start-ups.
24. MOU with Skyfi Education Labs Pvt., Ltd for conducting Weekend Training Programs for the Students
25. MOU with Guhring India Pvt. Ltd to carry out Internship / Project Work / Research in their Organisation
26. MOU with National Design and Research Foundation, Bangalore for Development of Interdisciplinary Research Projects, Micro Air Vehicles, Marine Vehicles etc.,
27. MOU with DBOI Global Services Pvt. Ltd., for conducting an extensive Faculty Development Program to train and develop the Faculty members
28. MOU with Federation of Karnataka Chambers of Commerce & Industries with an intention to foster Industry - Institution relationship
29. MOU with Trans Neuron Technologies for preparing June 2016 passing out Students on Programming Skills

**RESEARCH PROMOTION SCHEMES AVAILABLE AT
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**

Research Promotion Scheme (RPS)

RPS Promotes Research in identified thrust areas of in Technical Education. RPS is aimed to create research ambience in the institutes by promoting research in engineering sciences and innovations in established and newer technologies; and to generate Master's and Doctoral degree candidates to augment the quality of faculty and research personnel in the country.

Research and development activities are considered as an essential component of higher education because of their role in creating new knowledge and insight and imparting excitement and dynamism to the educational process, as well as make them need based in view of the national requirements. The objective of this scheme is to create and update the general research capabilities of the faculty members of the various Technical Institutes. The proposal should include a specific project theme with a clear statement of the objectives, details of equipments and other research facilities proposed to be acquired and the expected deliverables from the project.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments with relevant PG programme.	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Three Year	
4	Limit of Funding	25 Lakhs	
5	Disbursement of grant	Advance	Non Recurring component + Recurring component of Year 1
		2nd Installment	On completion of year 1 on submission of documents mentioned in 6.
		3rd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	To create and update general research capabilities.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS> Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS>Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.

4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments > AQIS > Schemes > AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -
	Covert MS Word softcopy application into PDF.
	Attach this PDF to your AQIS application on the portal.
	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
	Proceed and complete on line payment on the portal.
	Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.
8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Nationally Coordinated Project (NCP)

Promotes R & D on themes of National / Social importance, which may involve networking and collaboration amongst several institutions and industry user organizations.

Nationally Coordinated Project Scheme aims to plan, co-ordinate and execute integrated R&D programs, involving collaboration between several institutions, industry user organizations at National Level for societal Development Programs.

Research ventures that may be considered within Nationally Coordinated Project Scheme include the following:

- The research should be carried out at National level institution in coordination with participating institutions having proven track record and sufficient expertise in the proposed area.
- The lead institution must choose a person of eminence having relevant knowledge and expertise in the proposed area of research as the chief coordinator of the project.
- The project should have the financial participation from the participating industry (if any) to the extent possible.

Objectives:

- To plan, co-ordinate and execute integrated R&D programs, involving collaboration between several institutions, industry user organizations at National Level for societal Development Program.
- To aim and achieve break- through technology in relevant specific areas of national importance.
- To enhance national and international interaction, research dissemination and exchange of ideas in the areas of national importance (National societal problems- such as Disaster Mitigation, Air Pollution, Earth Quake resistant structures, Road Traffic Safety etc.).
- To provide recommendations and guidelines that will help evolve National policies and regulatory laws for enactment in concerned areas.
- To develop education program for awareness of masses and to suggest appropriate measures in concerned areas.
- To create good quality courseware (in the form of book, CD, Multimedia) for core and emerging subjects.
- To develop customized industry requested courses on emerging technologies within a short span of time.
- To promote general research capability in relevant areas of Technical education taking into account capability / strength of the lead institution & other institutions.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments with relevant PG programme and NBA accreditation and IISc, IITs, IIMs, NITs and Nationally important Institutes
2	Eligibility of the Coordinator	Full time regular Faculty
3	Duration of the Project	Three Year
4	Limit of Funding	50 Lakhs

5	Disbursement of grant	Advance	Non Recurring component + Recurring component of Year 1
		2nd Installment	On completion of year 1 on submission of documents mentioned in 6.
		3rd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly Report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Research shall contribute directly to the society as large.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS> Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS>Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments> AQIS> Schemes >AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -
	Covert MS Word softcopy application into PDF.
	Attach this PDF to your AQIS application on the portal.
	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
	Proceed and complete on line payment on the portal.
	Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhisham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.
8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

National Facilities in Engineering and Technology with Industrial collaboration (NAFETIC)

Aims to establish National Facilities in frontier areas of Engineering and Technology in collaboration with industry for design, instrumentation, testing, manufacturing etc. in AICTE approved Institutions.

The scheme intends to provide limited financial assistance to AICTE approved Institutions / University departments with the Industry partnership to promote and develop technical education in their professions through various means, including emerging technologies provided in their objective. Institutions receiving financial assistance under this scheme shall appropriately reflect the AICTE contribution towards the activity organized.

This scheme intends to encourage the activities of AICTE approved Institutions / University departments for following activities:

- Promoting exchange of information with technical institutions and teachers on significant issues of interest to them through appropriate publications like Handbook / Directory, Audio-Video resource materials, Monographs and proceedings of conferences / seminar etc.
- Aims at establishment of National facilities in frontier areas of engineering and Technology in collaboration with the Industry for design, instrumentation, testing, Manufacturing etc.
- To provide state of art R&D facilities, sophisticated testing, design and also provide necessary facilities.
- Organizing short-term training programmes for teachers and technical professionals.
- Organizing exhibitions / melas / jathas for promoting technology temper and awareness including traditional practices, technologies and concepts for the benefit of students and the society at large.
- Promoting interaction with students of technical education with the professionals with emphasis on professional practices, ethics, role-plays and professional guidance.
- Industry shall provide matching grant for collaboration.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments with relevant PG programme with accreditation from NBA.	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Three Year	
4	Limit of Funding	50 Lakhs from AICTE and matching grant from the Industry	
5	Disbursement of grant	Advance	Non Recurring component + Recurring component of Year 1
		2nd Installment	On completion of year 1 on submission of documents mentioned in 6.
		3rd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly Report along with Payment & Receipt A/c, Utilization	

		Certificate.
7	Expected Outcome	Provide state of art R&D facilities, high end testing and design facilities. The facility is required to be self-supporting after completion of the project.
8	Processing Methodology	Evaluation by three member expert committee.

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS> Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS>Format of Application http://www.aicte-india.org/ridschemes.htm
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8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Modernisation and Removal of Obsolescence in Technical Education (MODROBS)

The scheme equips technical institutions with infrastructural facilities, laboratories, workshops, and computing facilities to enhance teaching, training and research capabilities. However modernization or expansion of Library is excluded.

It also supports new innovations in Class Room and Laboratory / Teaching Technology, development of Lab Instructional Material and appropriate Technology to ensure that the practical work and project work to be carried out by students is contemporary and suited to the needs of the Industry.

The equipment funded under the scheme up to a maximum limit of Rs.20 lakhs could be ideally used for up-gradation of equipment in existing laboratories, enhancement of performance parameter specification of existing equipment, incorporation of latest development in the field and replacement of old depreciated equipment by modern equipment.

In addition to above major objectives, the equipment installed through MODROBS can be used for indirect benefit to Faculty / Students through Continuing Education programmes, Training programmes for local industry and consultancy work.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments of at least 10 years existence	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	One Year	
4	Limit of Funding	20 Lakhs	
5	Disbursement of grant	Advance	Non Recurring component + Recurring component
6	Relevant Documents	Project completion report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Modernization of existing Laboratories of AICTE approved Institutions	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments > AQIS > Schemes at www.aicte-india.org
2	Download softcopy format for the desired scheme from Departments > AQIS > Format of Application
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments > AQIS > Schemes > AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.

6	<i>You may copy – paste data from softcopy (as above) form to the application form on the portal.</i>
7	<i>Follow the steps given below to complete the submission of your application -</i>
	<i>Covert MS Word softcopy application into PDF.</i>
	<i>Attach this PDF to your AQIS application on the portal.</i>
	<i>Tick the declaration flag on the application.</i>
	<i>Press “Submit” button. Now no changes in application are possible.</i>
	<i>Proceed and complete on line payment on the portal.</i>
	<i>Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhisham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.</i>
8	<i>Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.</i>

Entrepreneurship Development Cell (EDC)

This is expected to be a support system for technocrats and entrepreneurs. The Entrepreneurs Development Cell set up under the scheme is expected to act as a tool to promote entrepreneurship and self-employment amongst technical students as an attractive and viable career option.

An entrepreneur is an owner or manager of a business enterprise who makes money through risk and initiative. The term was originally a loanword from French and was first defined by the Irish-French economist Richard Cantillon.

Entrepreneur in English is a term applied to a person who is willing to help launch a new venture or enterprise and accept full responsibility for the outcome. Jean-Baptiste Say, a French economist, is believed to have coined the word "entrepreneur" in the 19th century - he defined an entrepreneur as "one who undertakes an enterprise, especially a contractor, acting as intermediary between capital and labour". A broader definition by Say: "The entrepreneur shifts economic resources out of lower and into higher productivity and greater yield."

Entrepreneurship Development Centre (EDC) scheme aims to set up a cell where the skills required for being an Entrepreneur are developed.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Two Years	
4	Limit of Funding	5Lakhs	
5	Disbursement of grant	Advance	Non Recurring component + Recurring component of Year 1 = 3 Lakhs
		2nd Installment	On completion of year 1 on submission of documents mentioned in 6 = 2 Lakhs
6	Relevant Documents	Yearly Report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Establishment of EDC & develop entrepreneurs and shall be self-sustaining after two years of establishment.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments > AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments > AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.

4	Log in to AICTE web portal using Institute User Id and password
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6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -
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	Attach this PDF to your AQIS application on the portal.
	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
	Proceed and complete on line payment on the portal.
	Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.
8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Industry Institute Partnership Cell (IIPC)

Aims to create an IIP Cell in a Technical Institution which promotes interaction between faculty, students and industry

The objective of the IIP Cell is to reduce the gap between industry expectations (practice) and academic offerings (theory) by direct involvement of industry to attain a symbiosis.

All the Stakeholders, namely: Institutions, Industry, Students and Society stand to gain as it can be a win-win partnership. The Institutions stand to gain by way of up to date curricula, source of revenue generation by consultancy and R & D, source of manpower for employment, societal relevance, and most importantly acquisition of brand name/equity; industry stands to gain by way of availability of employable manpower pool, and increased productivity;

faculty stand to gain by way of exposure to latest industry practices for more effective teaching-learning processes, etc; students stand to gain by way of hands-on training, reduction of learning curve in industrial practices; and, society stands to gain by way of improved quality of goods and services.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments .	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Two Year	
4	Limit of Funding	15 Lakhs	
5	Disbursement of grant	Advance	Non Recurring component (5 Lakhs) + Recurring component of Year 1 (5 Lakhs) = 10 Lakhs
		2nd Installment	On completion of year 1 on submission of documents mentioned in 6 = 5 Lakhs
6	Relevant Documents	Yearly Report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Establishment of IIPC and good interaction with industry experts and should be self-sustainable after two years.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS> Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS>Format of Application http://www.aicte-india.org/ridschemes.htm
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Travel Grant (TG): Faculty

The scheme enables meritorious faculty to interact at international level Conferences, Seminars, and Symposia. Teachers from AICTE approved Technical Institutions / University departments are eligible for this grant.

The saying, “The world is a book, and those who do not travel read only a page,” aptly reflects the enrichment associated with travel. The benefits of travel are manifold; it broadens one’s horizon and rejuvenates one’s thought process. And if the objective is supported by an academic motive, travelling is an excellent opportunity to share knowledge and research ideas, to network and to renew professional acquaintances.

The All India Council for Technical Education encourages faculty members in its aegis to travel to international venues to present research papers at conferences, to participate in workshops and seminars, or even to gain exposure to the academic systems and best practices prevalent there. The Council’s Travel Grants Scheme is an initiative designed to ensure that Indian technical educators are at par with their global counterparts and reinforces the concept that “Knowledge is beyond boundaries”.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Not applicable	
4	Limit of Funding	1.5 Lakhs	
5	Disbursement of grant	Advance	Nil
		Reimbursement	Reimbursement on submission of documents mentioned in 6.
6	Relevant Documents	Travel documents, conference report along with payment and receipt account as applicable.	
7	Expected Outcome	Interaction of faculty at International level.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS> Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS>Format of Application http://www.aicte-india.org/ridschemes.htm
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5	Refer to Departments> AQIS> Schemes >AQIS User Manual for filling and submitting AQIS

	<i>application for desired scheme on portal.</i>
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	<i>Tick the declaration flag on the application.</i>
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	<i>Proceed and complete on line payment on the portal.</i>
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Seminar Grant (SG)

The scheme provides an opportunity to faculty, academicians and working professionals for sharing of ideas, innovations and inventions. AICTE approved Technical Institutions / University departments are eligible for this grant. Professional bodies, registered societies, National agencies are also eligible provided that the seminar is organized in collaboration with AICTE approved Technical Institutions / University departments.

The scheme provides financial assistance to institutions for organizing Symposium / Conference / Seminar / Workshop at National and International level in various fields of Technical Education. The Scheme intends to promote high standards in Technical Education by way of extending opportunities to the academicians and working professionals by providing a forum for sharing their knowledge, experiences, innovations and inventions.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Duration of Seminar 1 to 3 days	
4	Limit of Funding	3 Lakhs	
5	Disbursement of grant	Advance	50%
		Reimbursement	Reimbursement of balance on submission of documents mentioned in 6.
6	Relevant Documents	Conference/Seminar Report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Provides forum for interaction of academicians, sharing of innovations and inventions.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments > AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments > AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments > AQIS > Schemes > AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -

	<i>Covert MS Word softcopy application into PDF.</i>
	<i>Attach this PDF to your AQIS application on the portal.</i>
	<i>Tick the declaration flag on the application.</i>
	<i>Press "Submit" button. Now no changes in application are possible.</i>
	<i>Proceed and complete on line payment on the portal.</i>
	<i>Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.</i>
8	<i>Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select "AQIS History" tab. Fill the details as required and periodically update the details.</i>

Faculty Development Program (FDP)

The scheme is intended to provide opportunities through AICTE approved Staff Colleges / Institutions for induction training to teachers employed in AICTE approved Technical Institutions to facilitate upgradation of knowledge and skill.

A Faculty Development Program (FDP) is designed to

- enhance their teaching and other skills
- make them aware about modern teaching tools and methodologies
- Acquire knowledge about current technological developments in relevant fields.
- impart professional practices relevant to technical education
- achieve competitive teaching and learning environment and
- channelize development with respect to academic qualifications and personal matters

Through each FDP, 50 faculty members of AICTE approved Institutes are trained for a duration of **2 weeks at a time**.

Scheme of Faculty development is intended to provide opportunities for induction training to teachers employed in AICTE approved institutions in Engineering, Pharmacy, Management and Architecture to facilitate upgradation of knowledge and skill.

The program is proposed to cover the areas such as technical education policy, programs, new concepts, methods and techniques, theory and skill enrichment and upgradation of pedagogy, technology, motivation, communication skills, management and other relevant issues to keep pace with the changing scenario in Technical Education.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments and professional societies/bodies.	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	2 weeks	
4	Limit of Funding	7 Lakhs (minimum 50 participants x 2 weeks x7000 per participant per week)	
5	Disbursement of grant	Advance	50%
		Reimburse ment	Reimbursement of balance on submission of documents mentioned in 6.
6	Relevant Documents	FDP Report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Enhance quality of teachers, facilitate career progression and faculty development.	

8	Processing Methodology	Evaluation by three member expert committee.
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Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS> Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS>Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments> AQIS> Schemes >AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -
	Covert MS Word softcopy application into PDF.
	Attach this PDF to your AQIS application on the portal.
	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
	Proceed and complete on line payment on the portal.
	Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.
8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Emeritus Fellowship (EF)

The scheme allows use of services of highly qualified and experienced superannuated Professors / Scientists from National Importance Institutes, Centrally funded Institutes.

The Scheme of Emeritus Fellowship intends to utilize the services of highly qualified and experienced superannuated professors and scientist from IIT/NIT, IIM, IISc, CSIR labs, defence establishments, BARC, TIFR, INSA fellows, INA fellows, etc. imparting technical education in stimulating and achieving excellence in Technical Education i.e. in Engineering and Technology, Architecture, Town Planning, Management, Pharmacy, Applied Arts and Crafts and other areas as per the AICTE Act.

Under this scheme, Emeritus Fellow, who is not in service, may involve himself in a host institution on full time basis in the host Institution.

Remuneration of Rs. 6.5 lacs / annum to the Emeritus Fellow for maximum period of two years may be funded through this scheme.

The Fellowship is awarded for:

Generation of indigenous learning resource materials, manuals, state-of-the-art reports, monographs, reference books, hand-books, codes of practice, standards, related monographs in respective fields of specialization particularly in the areas of relevance to the activities of AICTE to meet the requirements of EDUSAT Program

An Emeritus Fellow has to teach at least one course in the host Institution.

Proposing, executing, guiding and monitoring of projects in the field of Engineering / Technology / Pharmacy / Architecture / Town Planning / Management / Applied Arts & Crafts and for the development of an AICTE approved Technical Institution.

Carry out research and development in application areas of professional / technical education

Develop emerging sectors of knowledge/innovative schools of thought in 'Technical Education'

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments with relevant PG programme	
2	Eligibility of the applicant	Superannuated professors and scientist from IIT/NIT, IIM, IISc, CSIR labs, defence establishments, BARC, TIFR, INSA fellows, INA fellows, etc.	
3	Duration of the Fellowship	Two Years (up to age of 70)	
4	Limit of Funding	6.5 Lakhs per year	
5	Disbursement of grant	1 st Installment	On completion of year 1 on submission of documents mentioned in 6.

		2 nd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly progress report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Add value and quality to teaching learning process.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments > AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments > AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
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	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
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8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Career Award for Young Teachers (CAYT)

The scheme promotes young talented teachers for advancing their professional growth by enabling them to devote maximum time in research and study with minimum teaching responsibility.

The purpose of the scheme is to identify young talented teachers who have established competence in their area of specialization. The scheme helps them in promoting their professional growth by enabling them to devote maximum time in research and study with minimum teaching responsibilities.

The scheme is open to regular teachers working in AICTE approved Technical Institutions / University Departments imparting technical education including Engineering and Technology, Architecture, Town Planning, Management, Pharmacy, Hotel Management & Catering Technology, Applied Arts & Crafts. It may please be noted that this award is neither a fellowship nor a scholarship.

Teachers having post graduate degree as minimum qualification with consistently good academic career and a demonstrated aptitude with commitment to research work, shall be eligible for the award. The age limit for the award is 35 years as on the last date for application.

The award is for a period of three years and this period should be devoted to work on the project only, with a teaching load of minimum of 6 hours per week in the Institution where the awardee is presently working. The awardees shall be treated as on duty and therefore they shall continue to earn normal increments and shall maintain seniority in their respective Institute / University / College. The awardee is not allowed to shift from the host institution that is the institution where the awardee is working under this scheme and the awardee will have to execute an undertaking with the institution in this regard. In case the awardee shifts from the host institution, the award will automatically get terminated and the award money released by the AICTE to the Institution with respect to the awardee, will have to be refunded immediately by the concerned Institution. The concerned Institution will have to execute an undertaking to the AICTE in this regard.

The awardee will also have to execute an undertaking with the Host Institution where the awardee is presently working, to work for 3 years at the Institution after the completion of the award.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments	
2	Eligibility of the Coordinator	Full time regular Faculty within 35 years of age	
3	Duration of the Project	Three Year	
4	Limit of Funding	3 Lakhs / per year	
5	Disbursement of grant	1 st Installment	On completion of year 1 on submission of documents mentioned in 6.
		2 nd Installment	On completion of year 2 on submission of documents mentioned in 6.
		3 rd Installment	On completion of year 3 on submission of documents mentioned in 6.

6	Relevant Documents	Yearly Report, project completion report along with Payment & Receipt A/c, Utilization Certificate.
7	Expected Outcome	Professional growth and incentive for innovations in teaching and research.
8	Processing Methodology	Evaluation by three member expert committee.

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
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Visiting Professorship (VP)

Is aimed at supplementing and providing expertise to teaching / research in those areas in which host institutions do not have the expertise. Eminent scholars holding the post of Professors shall be considered for appointment as Visiting Professors.

The main objective of the scheme is to supplement and provide expertise to the teaching / research in those areas in which the host institution needs the expertise.

1	Eligibility of the Institute	AICTE approved Govt and Govt aided Institutes	
2	Eligibility of the applicant	Superannuated professors and scientist from IIT/NIT, IIM, IISc, CSIR labs, defence establishments, BARC, TIFR, INSA fellows, INA fellows, etc.	
3	Duration of the Project	Two Years	
4	Limit of Funding	6.5 Lakhs per year	
5	Disbursement of grant	1 st Installment	On completion of year 1 on submission of documents mentioned in 6.
		2 nd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Supplementing and providing expertise to the faculty in which the host Institute may not have requisite expertise.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

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	<i>Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhisham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.</i>
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National Doctoral Fellowship (NDF)

The All India Council for Technical Education, (AICTE), in pursuance of the recommendations of the Review Committee on Post Graduate Education Research in Technical Education, has introduced National Doctoral Fellowship Scheme from 2002-2003. The scheme will be offered every year to selected candidates in emerging areas / disciplines of Technical Education by AICTE to pursue Doctoral Program.

Objectives:

- To attract highly qualified and motivated candidates to pursue doctoral degree and offer themselves for teaching position in the Technical Education system.
- To provide research support to bright young candidates for pursuing exciting and innovative research in the field of Technical Education.

Details of scheme:

- Scholarship @ Rs. 18,000/- per month per ND Fellow.
- Contingency grant of Rs. 25,000/- per annum to ND Fellow.
- Overhead charges of Rs. 20,000/- per annum per candidate to the host institutions i.e. Institution where the candidate will be pursuing Ph.D./Doctoral Programme.

1	Eligibility of the Institute	IITs, NITs, IISc, IIMs, BARC, TIFR, DRDO, ISCR, ISIR, Institutes of excellence and CentragGovt Research lab.
2	Eligibility of the applicant	Enrolled in one of the above Institute with GATE/GPAT/CAT with minimum 95percentile and age below 35 years.
3	Duration of the Project	Three Year
4	Disbursement of grant	<ul style="list-style-type: none"> • Fellowship @ Rs. 18,000/- per month per ND Fellow. • Contingency grant of Rs. 25,000/- per annum to ND Fellow. • Overhead charges of Rs. 20,000/- per annum per candidate to the host institutions i.e. Institution where the candidate will be pursuing Ph.D./Doctoral Programme.
5	Relevant Documents	Yearly report along with Payment & Receipt A/c, Utilization Certificate.
6	Expected Outcome	Enhance the number of PhD with quality
7	Processing Methodology	Evaluation by three member expert committee.

Steps to be carried out for submitting proposal

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	Proceed and complete on line payment on the portal.
	Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhisham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.
8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Research Park (RP)

Academic Institutes can be major resources in a company's innovation strategy. In the western countries, extensive collaboration between universities and industry and the ensuing transfer of scientific knowledge has been viewed as one of the main contributors to the successful technological innovation and economic growth of the past few decades. Transfer of knowledge from universities to industry should be a primary policy at academic Institutions.

To promote this concept, this scheme provides financial assistance to institutions for setting up Research Park in collaboration with the Industry or group of Industries. Grant of Rs. 1 crore (per State-UT) shall be given under this scheme.

Following terms shall be applicable to receive funding under this scheme,

- a) The Institute shall provide 500 sq m built up area for setting up research facilities in the Institute premises.
- b) The Institute shall collaborate with Industry or a cluster of Industries.
- c) The Industry partner/s shall also contribute Rs. 1 crore as matching grant for setting up research facilities at the Institute.
- d) Industry shall pass on their research/innovation work to the Institute or to a cluster of Institutes.
- e) Institute students and teaching faculty shall work on such ideas for converting into successful technological innovations / outcome based projects.
- f) Neighboring Institutes can also join the activity.
- g) Neighboring industries can also join the activity.

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments with NBA accreditation.	
2	Eligibility of the Coordinator	Head of the Institute	
3	Duration of the Project	Three Year	
4	Limit of Funding	Rs. 100 lakhs by AICTE and Rs. 100 Lakhs by participating Industry	
5	Disbursement of grant	Advance	Non Recurring component + Recurring component of Year 1
		2nd Installment	On completion of year 1 on submission of documents mentioned in 6.
		3rd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	To create and promote research capabilities and enhance the number of PhD with quality	
8	Processing Methodology	Evaluation by three member expert committee and subsequent yearly evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments> AQIS > Schemes >AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -
	Covert MS Word softcopy application into PDF.
	Attach this PDF to your AQIS application on the portal.
	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
	Proceed and complete on line payment on the portal.
	Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.
8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Innovation Promotion Scheme (IPS)

The scheme provides financial assistance to institutions for organizing technical projects exhibition at state/UT level. The scheme intends to bring out practical talent among students by providing a forum for exhibiting their technical knowledge and innovations. This scheme also intends to exhibit this talent to industry in order to convert useful / innovative / commercially viable projects into products. This will also initiate interest in entrepreneurship activities or in registering for patents/IPR etc.

Exhibition shall also include,

- technical lecture sessions by students / college staff / industry personnel
- seminars / webinars
- live demonstrations sessions
- poster presentations
- release of directory of participants
- visits to nearby industry / city / places as appropriate to the technical field of exhibition
- any other kind of modern / innovative technology display
- awards for quality projects on pre defined criteria

1	Eligibility of the Institute	AICTE approved Institutes / AICTE approved University Departments	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	Not applicable	
4	Limit of Funding	5 Lakhs	
5	Disbursement of grant	Advance	50%
		Reimbursement	On submission of documents mentioned in 6.
6	Relevant Documents	Completion report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	To create and update general research capabilities.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments > AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments > AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments > AQIS > Schemes > AQIS User Manual for filling and submitting AQIS

	<i>application for desired scheme on portal.</i>
6	<i>You may copy – paste data from softcopy (as above) form to the application form on the portal.</i>
7	<i>Follow the steps given below to complete the submission of your application -</i>
	<i>Covert MS Word softcopy application into PDF.</i>
	<i>Attach this PDF to your AQIS application on the portal.</i>
	<i>Tick the declaration flag on the application.</i>
	<i>Press “Submit” button. Now no changes in application are possible.</i>
	<i>Proceed and complete on line payment on the portal.</i>
	<i>Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.</i>
8	<i>Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.</i>

Summer Winter School Scheme (SWSS)

The scheme is intended to provide opportunities through AICTE approved Staff Colleges / Institutions for Subject training that enhances teaching skills to teachers employed in AICTE approved Technical Institutions to facilitate upgradation of knowledge and skill.

A Summer Winter School Scheme (SWSS) is designed to

- enhance their teaching and other skills
- make them aware about modern teaching tools and methodologies
- Acquire knowledge about current technological developments in relevant fields.
- impart professional practices relevant to technical education
- achieve competitive teaching and learning environment and
- channelize development with respect to academic qualifications and personal matters

Through each SWSS 50 faculty members of AICTE approved Institutes are trained for a duration of **Two weeks at a time**.

SWSS is intended to provide opportunities for Teacher training for faculty employed in AICTE approved institutions in Engineering, Pharmacy, Management and Architecture to facilitate upgradation of knowledge and skill.

The program is proposed to cover the areas such as technical Subject areas, new concepts, methods and techniques, theory and skill enrichment and upgradation of pedagogy, technology, motivation, communication skills, management and other relevant issues to keep pace with the changing scenario in Technical Education.

1	Eligibility of the Institute	AICTE approved Government and Government aided Institutes, QIP Centres, IIT's IISc, NIT's and NITIE	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Project	2 weeks	
4	Limit of Funding	Max Rs. 7.00 Lacs (Min. 50 participant x 2 weeks x Rs. 7,000per participant per week) or actual expenses whichever is less.	
5	Disbursement of grant	Advance	50%
		Reimburseme nt	Reimbursement on submission of documents mentioned in 6.
6	Relevant Documents	SWSS Report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Enhance quality of teachers, facilitate career progression and faculty development	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments> AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments> AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments> AQIS > Schemes >AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.
7	Follow the steps given below to complete the submission of your application -
	Covert MS Word softcopy application into PDF.
	Attach this PDF to your AQIS application on the portal.
	Tick the declaration flag on the application.
	Press “Submit” button. Now no changes in application are possible.
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8	Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.

Finishing School Scheme (FSS)

Employability of Engineering Graduates and their ability to deliver to industry expectation after they are hired has been a matter of concern and engaging the attention of academics and industry alike. Low industry readiness of fresh hires has resulted in long duration training programs affecting both productivity and cost of operations in highly competitive industry.

Institutes also face diverse challenges like shortage of skilled faculty and lack of clarity on what Industry requires. Inability to make students industry ready due to lack of clarity on how to design courses that help students become more professional team player and better communicator is only adding to the problem. Experts in this line of thought opine that the students, though educated are seldom employable, as they lack skills in areas which are most sought after by the industry.

The training on employability skills will help them connect with industry before they step into employment. Providing such training would have twin benefits, firstly, the students are well-prepared to enter the job market, which will positively impact their productivity at the workplace and secondly, companies will be spared of the huge amounts of investments required in pre employment training, especially in areas like soft skills. The programme will give them self confident in their profession.

1	Eligibility of the Institute	AICTE approved Govt and Govt aided Institutes and NITs	
2	Eligibility of the Coordinator	Full time regular Faculty	
3	Duration of the Programme	8 weeks after graduation and 12 weeks for students who are currently enrolled	
4	Limit of Funding	2 Lakhs for batch of 30 students	
5	Disbursement of grant	Reimbursement	on submission of documents mentioned in 6.
6	Relevant Documents	Project completion report with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	To enhance quality of students so that they become better employable.	
8	Processing Methodology	Evaluation by three member expert committee.	

Steps to be carried out for submitting proposal

1	Read overview about schemes at link Departments > AQIS > Schemes at http://www.aicte-india.org/ridschemes.htm
2	Download softcopy format for the desired scheme from Departments > AQIS > Format of Application http://www.aicte-india.org/ridschemes.htm
3	Download and fill softcopy format (MS Word) for desired scheme.
4	Log in to AICTE web portal using Institute User Id and password
5	Refer to Departments > AQIS > Schemes > AQIS User Manual for filling and submitting AQIS application for desired scheme on portal.
6	You may copy – paste data from softcopy (as above) form to the application form on the portal.

7	<i>Follow the steps given below to complete the submission of your application -</i>
	<i>Covert MS Word softcopy application into PDF.</i>
	<i>Attach this PDF to your AQIS application on the portal.</i>
	<i>Tick the declaration flag on the application.</i>
	<i>Press “Submit” button. Now no changes in application are possible.</i>
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	<i>Submit/Post hardcopy of PDF and copy of proof of payment to All India Council for Technical Education, (AICTE), NBCC Place, 4th Floor, Eastern Tower, Bhasham Pitmah Marg, Pragati Vihar, Lodhi Road, New Delhi-110003.</i>
8	<i>Every Institute shall enter the data on web portal about earlier grants received from AICTE. In order to complete this, log in to web portal with your Institute user Id and password and select “AQIS History” tab. Fill the details as required and periodically update the details.</i>

AICTE – INAE Travel Grant (TG): Students

The scheme enables meritorious students to interact at international level Conferences, Seminars, and Symposia. Students from AICTE approved Technical Institutions / University departments are eligible for this grant.

The saying, “The world is a book, and those who do not travel read only a page,” aptly reflects the enrichment associated with travel. The benefits of travel are manifold; it broadens one’s horizon and rejuvenates one’s thought process. And if the objective is supported by an academic motive, travelling is an excellent opportunity to share knowledge and research ideas, to network and to renew professional acquaintances.

The All India Council for Technical Education encourages regular students members in its aegis to travel to international venues to present research papers at conferences, to participate in workshops and seminars, or even to gain exposure to the academic systems and best practices prevalent there. The Council’s Travel Grants Scheme is an initiative designed to ensure that Indian technical students are at par with their global capabilities of students in other parts of the World, and reinforces the concept that “Knowledge is beyond boundaries”.

1	Implementing agency	Indian National Academy for Engineering (INAE)	
2	Eligibility of the candidate	Full time regular student of AICTE approved Institutes / AICTE approved University Department	
3	Duration of the Project	Not applicable	
4	Limit of Funding	1 Lakhs	
5	Disbursement of grant	Reimbursement	on submission of documents mentioned in 6.
6	Relevant Documents	Travel documents/Conference report, payment & receipt account.	
7	Expected Outcome	Interaction of students at International level.	
8	Processing Methodology	Evaluation by AICTE-INAE	

Complete the details as required and available at

URL: <http://www.inae.org/travelgrantstudents.html>

AICTE – INAE Teacher Research Fellowship (TRF)

The All India Council for Technical Education, (AICTE), in pursuance of a larger goal of improving Quality amongst faculty in Graduate and Post Graduate Education and Research in Technical Education, has introduced **AICTE – INAE Teacher Research Fellowship (TRF)** Scheme from 2012-2013. The scheme will be offered every year to selected candidates in emerging areas / disciplines of Technical Education to pursue Doctoral Program.

Objectives:

- The Doctoral Research to be conducted only in CSIR and DRDO Laboratories
- To attract highly qualified and motivated candidates to pursue doctoral degree and offer themselves for teaching position in the Technical Education system.
- To provide research support to bright young candidates for pursuing exciting and innovative research in the field of Technical Education.

Details of scheme:

- Scholarship @ Rs. 15,000/- per month per AICTE – INAE Fellow.
- Contingency grant of Rs. 10,000/- per annum to AICTE – INAE Fellow.

1	Implementing agency	Indian National Academy for Engineering (INAE)
2	Eligibility of the candidate	Full time regular student of AICTE approved Institutes / AICTE approved University Department with age below 35 years
3	Duration of the Project	3 Years
4	Disbursement of grant	<ul style="list-style-type: none">• scholarship @ Rs. 15,000/- per month per AICTE – INAE Fellow.• Contingency grant of Rs. 10,000/- per annum to AICTE – INAE Fellow.
5	Relevant Documents	Yearly report along with payment and receipt account, Utilisation certificate by Institute
6	Expected Outcome	Enhance the number of PhD with quality
7	Processing Methodology	Evaluation by AICTE-INAE

Complete the details as required and available at

URL: http://www.inae.org/Teacher_research_fellowship.html

AICTE – INAE Distinguished Visiting Professorship (DVP)

The Indian National Academy of Engineering (INAE), founded in 1987 comprises a Fellowship of the most distinguished engineers, engineer-scientists and technologists of India and abroad from the entire spectrum of engineering disciplines. It is a peer body of engineering professionals with the aim to promote and advance the practice of engineering and technology, related science disciplines and their applications to problems of national importance. It also encourages inventions, scientific investigations, and research in pursuit of excellence in the field of engineering. Activities of the Academy include, research projects, pilot studies, technical education, fellowships, recognitions and awards and programmes on issues of technology policy and overall development for the benefit of the society and other benefactions.

It has long been felt that there is a need for active linkages between industry and engineering institutions which not only enrich the curriculum contents but also add another dimension to the existing systems of continuing education programmes, extension lectures and consultancy by faculty. Technology developed through academic and R&D institutions generally falls short of the needs of the industry for design and manufacture of new products and for engineering services to meet the demands of the customers and challenges of market competition. This gap can be narrowed down through a coordinated approach ensuring closer interactions among industry, R&D institutions and the academia, through institutionalized mechanisms. Active programmes should be established for regular visits of experts from industry to address students, academic and scientific staff and to spend a few days at campuses for participating in teaching or research.

The Indian National Academy of Engineering (INAE) launched a Distinguished Visiting Professorship (DVP) Scheme jointly with AICTE in 1999. The Scheme envisages promotion of industry-institute interaction by facilitating the dissemination of knowledge through the expertise of experienced and knowledgeable persons from industry to integrate their rich industrial experience with technical education. The Scheme has received very enthusiastic response from industry and engineering research institutions over the years. Thirteen Industry Experts were selected during the year 2000; eighteen each in 2001 and 2002; fourteen in 2003; ten in 2004; thirteen in 2005; fourteen during the year 2006, fifteen during 2007; eleven during 2008; eighteen during the year 2009, nine during the year 2010 and seven during the year 2011 by a high level selection committee of experts from Academia, Industry and representatives from AICTE and CII.

The scheme has been running successfully and has received good response from industry as well as engineering colleges/institutions. The success of the scheme is largely attributed to active participation of experts from renowned industries like TATA Steel, Larsen & Toubro Ltd., Hinduja Automotive Limited, ArcelorMittal, JK Industries Ltd, Kirloskar Brothers Limited, TVS Motor Company Ltd., Tata Consulting Services, GE India Technology Centre Pvt Ltd, ST Microelectronics, Grasim Industries Limited, Bharat Earth Movers Ltd, Bharat Heavy Electricals Ltd, M/s IP Rings, Indian Oil Corporation Ltd, Andromedia Communications Pvt Ltd, Solar Semiconductor Pvt Ltd, Tata Research Development & Design Centre, Aditya Birla Group (Cement Division) and Jindal Stainless Steels Ltd etc.

There is a constant endeavour to improve and strengthen the functioning of the scheme for which suggestions/views are sought from the industry experts as well as affiliated engineering colleges/institutions through a Feedback Report after each visit by the industry expert. Positive feedbacks have been received

and some of the representative feedbacks from engineering colleges/institutions associated with this scheme are included in the last page.

1	Eligibility of the Institute	AICTE approved Govt and Govt aided Institutes	
2	Eligibility of the applicant	Superannuated professors and scientist from IIT/NIT, IIM, IISc, CSIR labs, defence establishments, BARC, TIFR, INSA fellows, INA fellows, etc.	
3	Duration of the Project	Two Years	
4	Limit of Funding	6.5 Lakhs per year	
5	Disbursement of grant	1 st Installment	On completion of year 1 on submission of documents mentioned in 6.
		2 nd Installment	On completion of year 2 on submission of documents mentioned in 6.
6	Relevant Documents	Yearly report along with Payment & Receipt A/c, Utilization Certificate.	
7	Expected Outcome	Supplementing and providing expertise to the faculty in which the host Institute may not have requisite expertise.	
8	Processing Methodology	Evaluation by INAE	

Complete the details as required and available at

URL: http://www.inae.org/academia_industries_intraction_professorship.html

WEB LINKS OF FUNDING AGENCIES: IIT-DELHI INDUSTRIAL RESEARCH & DEVELOPMENT UNIT

Courtesy: http://ird.iitd.ac.in/funding_agencies

Web Links of Funding Agencies

Funding Agencies
<u>Aeronautics Research and Development Board (ARDB)</u>
<u>Atomic Energy Regulatory Board (AERB)</u>
<u>Bhabha Atomic Research Centre (BARC)</u>
<u>Centre for Development of Advanced Computing (CDAC)</u>
<u>Centre for Development of Telematics (C- DOT)</u>
<u>Coal India Ltd.</u>
<u>Council of Scientific & Industrial Research (CSIR)</u>
<u>Defence Research & Development Organisation (DRDO)</u>
<u>Department of Atomic Energy</u>
<u>Department of AYUSH</u>
<u>Department of Biotechnology (DBT)</u>
<u>Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers</u>
<u>Department of Fertilizers, Ministry of Chemicals & Fertilizers</u>
<u>Department of Ocean Development</u>
<u>Department of Science & Technology (DST)</u>
<u>Deutsche Forschungsgemeinschaft (DFG – German Research Foundation)</u>
<u>GAIL (India) Ltd.</u>
<u>Indian Council of Agricultural Research (ICAR)</u>
<u>Indian Council of Medical Research (ICMR)</u>
<u>Indian Council of Social Science Research (ICSSR)</u>
Funding Agencies
<u>Indian National Science Academy (INSA)</u>
<u>Indian Space Research Organisation (ISRO)</u>
<u>Indo French Centre for the Promotion of Advanced Research (IFCPAR)</u>
<u>Indo-US Science & Technology Forum</u>
<u>Ministry of Agro & Rural Industries</u>
<u>Ministry of Communications & Information Technology</u>
<u>Ministry of Defence</u>
<u>Ministry of Environment & Forests (MoEF)</u>
<u>Ministry of Health & Family Welfare</u>

Funding Agencies

<u>Ministry of Micro, Small and Medium Enterprises</u>
<u>Ministry of New and Renewable Energy (MNRE)</u>
<u>Ministry of Petroleum & Natural Gas</u>
<u>Ministry of Power</u>
<u>Ministry of Road Transport & Highways</u>
<u>Ministry of Rural Development</u>
<u>Ministry of Textiles</u>
<u>Ministry of Urban Development</u>
<u>Ministry of Water Resources</u>
<u>National Science Foundation</u>
<u>Naval Research Board (NRB)</u>
<u>Northern Indian Textile Research Association (NITRA)</u>
<u>Oil & Natural Gas Corporation Ltd (ONGC)</u>
<u>Petroleum Conservation Research Association (PCRA)</u>
<u>Science and Engineering Research Board (SERB)</u>
<u>Tata Institute of Fundamental Research</u>
<u>Technology Information, Forecasting & Assessment Council (TIFAC)</u>
<u>UK India Education and Research Initiative (UKIERI)</u>
<u>University Grants Commission</u>

Online System

- [IRIS](#)

Information for Faculty

- [Operational Guidelines for a Sponsored Research Project](#)
- [Institute Overhead Distribution Norms](#)
- [PDF Creation and Utilisation Norms](#)
- [PDF Distribution Norms](#)
- [Project Recruitment Norms](#)
- [New Faculty Grants](#)
- [SBI Corporate Card](#)

Information for Students

- [SURA](#)
- [Assistantships / Fellowships](#)
- [Honorarium from Projects](#)
- [Research Scholar Travel Award](#)

Screen Shot:

The screenshot shows a web browser window displaying the 'Web Links of Funding Agencies' page on the IITD website. The browser's address bar shows the URL 'ird.iitd.ac.in/funding_agencies'. The website header includes the IITD logo and the text 'Industrial Research & Development Unit, Indian Institute of Technology Delhi'. A navigation bar contains links for 'IITD Home', 'Jobs@ird', 'Directory', 'Intranet', and 'Contact Us'. The main content area is titled 'Web Links of Funding Agencies' and contains a table of funding agencies. The sidebar on the left provides links for 'Projects & Consultancies', 'Information for Superannuated Faculty', 'General Information', and 'Project Positions @IIT Delhi'. The sidebar on the right includes 'Online System', 'Information for Faculty', 'Information for Students', and 'Circulars'. The Windows taskbar at the bottom shows the Start button, several open applications, and the system clock displaying 6:18 PM.

Funding Agencies
Aeronautics Research and Development Board (ARDB)
Atomic Energy Regulatory Board (AERB)
Bhabha Atomic Research Centre (BARC)
Centre for Development of Advanced Computing (CDAC)
Centre for Development of Telematics (C- DOT)
Coal India Ltd.
Council of Scientific & Industrial Research (CSIR)
Defence Research & Development Organisation (DRDO)
Department of Atomic Energy
Department of AYUSH
Department of Biotechnology (DBT)
Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers
Department of Fertilizers, Ministry of Chemicals & Fertilizers
Department of Ocean Development
Department of Science & Technology (DST)
Deutsche Forschungsgemeinschaft (DFG – German Research Foundation)
GAIL (India) Ltd.
Indian Council of Agricultural Research (ICAR)

PROSPECTIVE SPONSORING AGENCIES FOR R&D PROJECTS

Following is a tentative list of prospective sponsoring agencies for sanction of R&D projects. There can be more number of sponsoring agencies and more number of schemes for R&D projects, which the faculty members are requested to individually make efforts and apply. The information given below is not complete and may change. Hence the faculty members are also requested to visit the respective notices/web sites for detailed and updated information.

Naval Research Board (DRDO)

The Board supports basic research that will generate new knowledge potentially useful to the Navy and to train young minds to generate and apply that knowledge for naval purposes.

Submission of project proposal: http://nrbdndo.res.in/submission_proposal.html For more

details: <http://nrbdndo.res.in/>

Aeronautics Research and Development Board (AR&DB) (DRDO)

The Aeronautics R&D Board has instituted a Grants-in-Aid Scheme to nurture the available research talent and to develop facilities higher technological institutes, colleges and other research centres including industry in the country for promoting research, design and development programmes in Aeronautics and Allied Sciences, keeping in view the future needs of the country with respect to aircraft, helicopters, missiles and all other air borne vehicles & their operation. Under this scheme, grants are offered to approve research institutions, universities or colleges, departments or laboratories or individuals attached to reputed industrial firms with R&D facilities both in the Government and non-Government sector. The scheme will be coordinated through a number of specialist panels duly constituted by the Chairman AR&DB to cover the different disciplines viz.

- Aerodynamics □ Structures
- Aerospace Resources □ Systems & Systems Engineering
- Materials & Manufacturing □ Special Interest Group for Micro
- Propulsion Aircraft (SIGMA)

For rules & grants: http://drdo.gov.in/drdo/boards/ardb/rules&grants_intro.htm

Topics of interest: http://drdo.gov.in/drdo/boards/ardb/notice_board.htm

Armaments Research Board (DRDO)

DRDO is promoting innovative/basic research among Academic and Research Institutions across the country through Grant-in-Aid schemes of Research Boards and Dte of ER & IPR. Under these schemes, grants are offered to research organizations / universities / departments/ laboratories to carry out research in basic sciences and engineering, setting up of basic facilities/infrastructures and conduct of conference/seminars/ symposia/ workshops etc.

For Area of interest and formats: <http://drdo.gov.in/drdo/English/index.jsp?pg=armreb.jsp>

Life Sciences Research Board (DRDO)

The Board is striving to enhance health and efficiency of the soldiers operating under different harsh environmental conditions including high altitude, extreme cold, desert and micro environment of different

operating systems. The major thrust areas of LSRB are life support system and biomedical technologies for air, land and sea operations, military psychology, cognitive engineering, personnel selection, human adaptation to extreme environments, ergonomics and human factors/engineering for equipment development and man machine interface, nutrition, radioprotection, stress management, combat fatigue, biodefence against human, animal and plant pathogens, specialized food technologies, vector and malaria control, biotechnology and high altitude agro animal technologies, nuclear, biological and chemical detection, protection and decontamination.

For guidelines and rules: <http://drdo.gov.in/drdo/boards/lrsb/fplsrb.htm>

Board of Research in Nuclear Sciences (BRNS) (DAE)

BRNS, Department of Atomic Energy (DAE) supports extramural research and development activities in nuclear and allied sciences, engineering and technology through its nodal funding agency - the Board of Research in Nuclear Sciences (BRNS). BRNS continuously strives to encourage, enthuse and support scientists and engineers in pursuing excellence in R & D programmes of interest and relevance to DAE.

Format and other details: http://barc.gov.in/brns/brns_research.html

National Board for Higher Mathematics (NBHM) (DAE)

The NBHM has various schemes to provide financial support to institutions and individuals to strengthen the mathematical base/potential through study, exchange or other such programs. NBHM provides assistance for selected research projects on the recommendations of the Research Programmes Committee of NBHM. Applications in prescribed forms obtainable from the office of NBHM have to be submitted well in advance.

Application forms: <http://www.nbhm.dae.gov.in/forms/research.doc>

Brochure: <http://www.nbhm.dae.gov.in/forms/brochure.doc>

Indian Space Research Organisation (ISRO)

ISRO has evolved a programme through which financial support is provided for conducting research and development activities related to Space Science, Space Technology and Space Application to academia in India. This programme of Research Sponsored by ISRO is called RESPOND. In special cases research and development projects proposed by non-academic R & D laboratories can also be supported through this programme. The aim of RESPOND is to encourage quality research in areas of relevance to the Indian space programme.

Forms & Formats: <http://www.isro.org/scripts/srgeneralrules.aspx>

Area of Research: <http://www.isro.org/scripts/srareasofresearch.aspx#> For More

Details: <http://www.isro.org/scripts/srrespond.aspx>

Indian Council of Medical Research (ICMR)

ICMR invites proposals for enhancing research and development activities.

ONLINE SUBMISSION of Extramural Research Projects: <http://icmr.cdacnoida.in/ICMR/>

Thrust Areas of Research: <http://icmr.nic.in/thrust/thrust.htm>

For more details: <http://www.icmr.nic.in/Grants/Grants.html>

Department of Electronics and Information Technology

DEIT encourages collaborative R&D between industry and academics/ R&D institutions for development of products and packages and bridge the gap between R&D and commercialization. DIT has already circulated the details of Multiplier Grants Scheme to Industry associations for circulation amongst its members and to leading academic institutions.

Project Proposal: [http://deity.gov.in/sites/upload_files/dit/files/mgsiopp proposals\(1\).pdf](http://deity.gov.in/sites/upload_files/dit/files/mgsiopp proposals(1).pdf)

Terms & Conditions: http://deity.gov.in/sites/upload_files/dit/files/Terms&conditions.pdf **Ministry of Earth Sciences**

All projects in the subject area mentioned below can be submitted for funding from Ministry of Earth Sciences. The various subject areas for funding are:

- Atmospheric Science □ Hydrology & Cryosphere
- Earth System Science Technology □ Ocean Science & Resources
- Geoscience

For formats: <http://dod.nic.in/RND/FORMATS.doc>

Guidelines: http://dod.nic.in/RND/new_2_Guidelines.pdf

Terms and Conditions: <http://dod.nic.in/RND/Terms&Condition.pdf>

For More Details: <http://dod.nic.in/RND/rnd.html>

Ministry of Environment & Forests

The Ministry invites research proposals in prescribed format on various topics.

Application Forms & Guidelines: http://envfor.nic.in/sites/default/files/re_guidelines_f_indd.pdf

For More Details: <http://envfor.nic.in/division/call-research-proposals>

The Ministry of Environment & Forests also invites research proposals for financial support in prescribed format under its NNRMS Programme. The NNRMS Programme supports research projects aimed at optimal utilization of remote sensing techniques along with conventional methods for addressing key environmental and ecological issues such as management of forests, grasslands, faunal resources, wetlands, coastal areas management including conservation of mangroves and coral resources, land degradation, impact of developmental activities on environment.

For More Details: <http://envfor.nic.in/division/call-proposals-under-nnrms-programme>

Ministry of New and Renewable Energy (MNRE)

The Ministry has identified thrust areas in which R&D efforts are required. Ministry considers R&D proposals which are directly related to the activities/ programmes of the Ministry and hold promise for commercialization in near future. The thrust areas mainly covers programmes, such as, Rural Energy; Solar Energy; Energy from Urban & Industrial Wastes; Power Generation- Wind, Biomass, Small Hydro; New Technologies- Chemical Sources (fuel cells), Hydrogen, Ocean & Geothermal Energy; etc.

R & D Formats: <http://www.mnre.gov.in/schemes/r-d/rd-formats/>

New Schemes: <http://www.mnre.gov.in/schemes/r-d/scheme-10/>

For More Details: <http://www.mnre.gov.in/schemes/r-d/solar-pv-3>

Department of Chemicals & Petro-Chemicals

Department of Chemicals & Petro-Chemicals a part of the Ministry of Chemicals and Fertilizers invites proposals for research projects and establishing Center of Excellence in educational institutions.

For New Schemes: <http://chemicals.nic.in/govtschemes.htm>

For More Details: <http://chemicals.nic.in/>

Ministry of Food Processing Industries

Ministry supports research proposals of applied nature having commercial importance resulting in development of innovation products, processes, improvement in manufacturing practices, which leads to enhancement of quality and shelf life of food products thereby development of food processing industries in the country.

Guidelines & Formats:

<http://www.mofpi.nic.in/SchemeViewPage.aspx?KYEwmOL+HGpVvrjs+CYNME2/tuHIAhSoewlyuW4ovCBykeENzIXaUKDErydVWL6V0yT9wKiwyYP5mR3gNk/zpp/ulzW70foHl2JZ8qgdRj5YbZBWq70BvEDsLxDwud7uq2RIDPVIUZy+axlha0j6VudsZMy/oRaBluqZVVf7Eir0fkhhKGVlrmPiA7t30eBs6WzIzjxtZu39jghF94IXUaIL5qqoL3hXT/3XTlyQxQ=>

Central/State Government and its organizations/Universities(including deemed universities) are eligible for grant-in-aid of entire cost of laboratory equipments required for labs and 25%of the cost of technical civil works to house the equipments and furniture and the fixtures associated with the equipments

For More Details:

<http://www.mofpi.nic.in/SchemeViewPage.aspx?KYEwmOL+HGpVvrjs+CYNME2/tuHIAhSoewlyuW4ovCBykeENzIXaUKDErydVWL6V0yT9wKiwyYP5mR3gNk/zpp/ulzW70foHl2JZ8qgdRkr+ml2UXxqt5g8pQGNkquV6g5/+DMKKIIIBtFwPuZDSe7dvV23bHLI09lp7y4fVWnuXP8zyxdYHWycDTeQupZF6mozfPd+I9loX9Hyfpaxg6IMl2PJ2euYpAizBW8eh4LGM5wfFQbtyRTFWMh2wscI>

Establishment of Centers of Excellence in Frontier Areas of Science and Technology (MHRD)

The Centre of Excellence (CoE) is expected to be a collaborative activity between a team of high quality researchers in the institution and researchers or research-users in several companies or organizations on new and emerging technologies, multi-disciplinary and translational research relevant to national development goals.

Forms & Formats: http://mhrd.gov.in/sites/upload_files/mhrd/files/FAST.pdf

Council of Scientific & Industrial Research

CSIR provides financial assistance to promote research work in the fields of Science & Technology, including Agriculture, Engineering and Medicine. The assistance is provided by way of grants to Professors/Experts in regular employment, in the universities, IITs, postgraduate institutions, recognised R&D laboratories both in public and private sectors. Research proposals of applied nature as well as those falling under basic sciences which attempt to solve specific problems being pursued by CSIR laboratories, or in newer and complementary fields, are considered for CSIR support. Priority is given to multi-disciplinary projects which involve inter-organisational co-operation (including that of CSIR laboratories). However, preference is given to schemes which have relevance to research programmes of CSIR laboratories

Forms & Formats: http://csirhrdg.nic.in/res_forms.htm

Guidelines and other details: http://csirhrdg.nic.in/res_grants.htm

Ministry of Mines

Science and Technology Project Proposals are invited from academic institutions for the thrust areas in mining.

Guidelines and formats: http://mines.nic.in/writereaddata/Filelinks/ad8571cc_merged_document.pdf

Ministry of Water Resources

Ministry of Water Resources (MoWR) provides financial assistance to promote research work in the field of Water Resources Engineering. The assistance is provided by way of grants to academicians / experts in the Universities, IITs, recognised R&D laboratories, Water Resources / Irrigation departments of the Central and State Governments and NGOs. Research proposals of applied nature as well as basic research are considered for MoWR support.

Forms & Guidelines: <http://wrmin.nic.in/writereaddata/linkimages/intro932183917.pdf> **Central Mine Planning & Design Institute Limited (CMPDI)**

CMPDI invites research proposals in prescribed format on various topics. For more details:

<http://www.cmpdi.co.in/research.php>

INSPIRE Fellowship (DST)

INSPIRE fellowship aims at enhancing research fellowships for doctoral studies and opening up partnerships with private sector for topping the Government's efforts in nurturing talents for scientific research. This scheme is applicable to Basic and Applied sciences as well as Medicine, Agriculture etc. with provision of multiple entries. The fellowship will be offered to (1) University 1st Ranker in a particular subject at PG level examination in Basic and Applied Science courses as well as (2) INSPIRE scholar, who have secured aggregate marks of 65 % or above at the 2 year MSc or 5 year Integrated MSc/MS

For More details: <http://www.inspire-dst.gov.in/fellowship.html>

INSPIRE Faculty Scheme (DST)

INSPIRE Faculty Scheme opens up an 'Assured Opportunity for Research Career (AORC)' for young researchers in the age group of 27-32 years. It is expected to augment high quality scientific manpower in scientific and educational institutions. It provides attractive opportunities to young achievers for developing independent scientific profiles and intends helping them emerge as S&T leaders in the long term. The Scheme offers contractual research positions. It provides career opportunities, but it is not a guarantee for tenure positions after 5 years.

Eligibility: Indian citizens and people of Indian origin including NRI/PIO status with PhD (in science, mathematics, engineering, pharmacy, medicine, and agriculture related subjects) from any recognized university in the world.

Those who have submitted their PhD Theses and are awaiting award of the degree are also eligible.

The upper age limit at the time of awarding the offer should be 32 years for considering support for a period of 5 years.

Candidates who are employed (in any form i.e. permanent, contractual) with any organization within India will be eligible to apply. However, they will be considered only for the Research Grant component of the INSPIRE Faculty Award scheme.

For more details: http://www.inspire-dst.gov.in/faculty_scheme.html

Fund for Improvement of S&T Infrastructure (FIST) (DST)

Considering the present status of the S&T sector in the universities and related academic institutions who are in dire need for strengthening the existing S&T infrastructure support with adequate funding and associated flexibility, Government of India in the year 2000 announced a major new initiative titled "Fund for Improvement of S&T infrastructure in universities & higher educational institutions (FIST)" to rebuild the Science & Technology infrastructure in the country.

Eligibility: For University / Academic Institutions, the support will be considered for the 'Department / School / Center' as a unit. All Science (including Medical & Agriculture) and Engineering Departments/ Centres having strong postgraduate teaching and research programs which have existed for at least 3 years or more in universities and other higher educational institutions are eligible. The Department/ Centre/ School already supported under FIST Program may submit fresh proposal after completion of the ongoing project provided such projects completed in all respects and obtained 'Completion Certificate' whose copy may be attached in the current proposal. Progress of ongoing project of the Department/ Centre/ School will be monitored as per monitoring schedule of the Program and any additional requirements will be considered as a part of that exercise.

For More Details: <http://www.fist-dst.org/index.asp>

Forms and Formats available at: <http://www.fist-dst.org/html-flies/formats.htm>

Advertisement & guidelines for new proposals: <http://www.fist-dst.org/htmlflies/advertisement-guidelines.htm>

Nano Mission (DST)

The Nano Mission is an umbrella programme for capacity building which envisages the overall development of this field of research in the country and to tap some of its applied potential for nation's development. In brief, the objectives of the Nano-Mission are:

- Basic Research Promotion
- Infrastructure Development for Nano Science & Technology Research
- Nano Applications and Technology Development Programmes
- Human Resource Development
- International Collaborations

How to apply: The Nano Mission receives proposals for financial support throughout the year. In other words, there is no last date for applying for financial support. Decisions on various funding applications are taken periodically. Currently, financial support for the following R&D activities is available —

- R&D projects from individual scientists or a group of scientists. Normal duration of such projects will be 3 years.
- Establishment of centres of excellence and sophisticated research facilities. Normal duration for such projects will be 5 years.
- Joint Institution-Industry Linked projects for development of products and devices utilizing nanotechnology. In such projects, partial financial contribution by the participating industry is desirable. For the participating industry, DSIR's SIRO recognition is desirable. Normal duration for such projects will be 3-5 years.
- Launching M.Sc./M.Tech. programmes in Nano Science and Technology in government institutions.

Formats & Guidelines: http://nanomission.gov.in/Formats_new/formats_Guideliness_nano.htm

Guidelines for implementing projects: <http://nanomission.gov.in/formats/guideI.htm>

Online Project Submission portal: <http://nanomission.gov.in/online.htm>

Joint Institute – Industry linked projects: http://nanomission.gov.in/Formats_new/NEW/NewPPD-III_NATDP.doc

Women Scientists Scheme (WOS-A): (DST)

The 'Women Scientists Scheme (WOS-A)' of the Department of Science and Technology is aimed to provide opportunities to women scientists and technologists for pursuing research in basic or applied sciences in frontier areas of science and engineering (like (1) Physical Science; (2) Chemical Science; (3) Mathematical Science; (4) Life sciences; (5) Earth Sciences; (6) Atmospheric Sciences; (7) Engineering Sciences). A special provision has been made under this Scheme to encourage those women scientists who have had breaks in their careers. Persons already in employment need not apply.

For Details & Formats: <http://online-wosa.gov.in:8080/wosa/public/doWelcome.action>

Women Scientists Scheme (WOS-B): (DST)

This scholarship is specially intended to encourage women scientists involved in research and application of innovative solutions for various societal issues. This scholarship would be made available to the aspiring women scientists willing to work for the search, design, adaptation and demonstration of Science and Technological skills and techniques for improving the income generating activity and reducing drudgery of weaker sections of our society in different occupations, capacity building on the societal programs at the grassroot level etc.

The minimum essential qualifications are PG degree equivalent to M.Sc in basic or Applied Science, B Tech in Engineering Science and MBBS or other equivalent professional qualifications. The desirable qualifications are PhD in Basic or Applied Science, M.Tech in Engineering Science and MD/MS, DM/MCH in Medical Science from recognized Universities. Cut off age for the candidate is 50 years. The candidates should also have working experience and linkages with the relevant organization to carry out research on R&D projects of societal relevance.

Guidelines for WOS-B:

http://www.dst.gov.in/whats_new/whats_new11/Terms_and_Conditions_for_WOS-B.pdf

Department of Science and Technology Fellowship for Women Scientists (DISHA) program:

http://www.dst.gov.in/whats_new/whats_new12/WOS-B-2012.PDF

Women Scientists Scheme (WOS-C): (DST)

This category is mainly focused to provide an opportunity to women scientists for selfemployment by utilizing their specialized domain knowledge in areas such as patenting, proof reading, science journalism, technical translation, clinical pathology labs, medical transcription etc. The objective of this scholarship is to create a large pool of trained women workforce with experience in the diverse areas mentioned above and building up a professional network.

For More Details: <http://www.dst.gov.in/scientific-programme/wos-ppts/WOS-C.pdf>

National Science & Technology Management Information System (NSTMIS) (DST)

The National Science & Technology Management Information System (NSTMIS) division of the Department of Science & Technology (DST) is the nodal agency for collection, analysis and dissemination of vital S&T information at the national level.

The Scheme: The division sponsors research projects/studies to interested investigators / organizations under the NSTMIS Scheme. The broader areas where studies could be taken up in the sponsored mode are S&T investment, S&T infrastructure, S&T output, S&T databases, S&T manpower, R&D productivity/efficiency etc.

Some of the areas in which the research proposal/ studies could be submitted are given as below:

- Human Resources in S&T
- R&D Infrastructure/ Resources
- S&T Studies in Higher Education Sector
- Mobility of S&T Professionals
- R&D and Innovation
- IPR Management
- Scientometric Studies in S&T

The pertinent themes / sub-areas to be addressed under these areas for submission of research proposals under the NSTMIS Scheme are listed at the NSTMIS website.

Who can apply: Scientists, Technologists, Statisticians, Economists, Sociologists, Development/ Planning/ Policy Experts, Management Specialists etc. from academic/ research institutions, registered societies, and consultants may submit their proposals in a prescribed format.

Call for research proposals: <http://www.nstmis-dst.org/PDF/CallforResearchProposals.pdf>

For Guidelines: <http://www.nstmis-dst.org/Guideline.aspx>

Formats are available: <http://www.nstmis-dst.org/Format.aspx>

Drugs & Pharmaceutical Research (Collaborative R&D Projects) (DST)

Recognising the profound influence of R&D on the prospects and opportunities for the growth of the Indian Drug Industry, Department of Science and Technology (DST), Government of India mounted the programme on drug development during 1994-95 for promoting collaborative R&D in drugs and pharmaceuticals sector with the following specific objectives:

- To synergise the strengths of publicly funded R&D institutions and Indian Pharmaceutical Industry.
- To create an enabling infrastructure, mechanisms and linkages to facilitate new drug development.
- To stimulate skill development of human resources in R&D for drugs and pharmaceuticals; and
- To enhance the nation's self-reliance in drugs and pharmaceuticals especially in areas critical to national health requirements.

Any Indian company/firm engaged in drug development manufacturing jointly with:

- National laboratory under CSIR, ICMR, etc.
- University department/other academic institution such as IIT, IISc., etc.
- Any other publicly funded R&D Institution

For More Details: <http://www.dst.gov.in/scientific-programme/td-drugs.htm>

Instrumentation Development Programme (DST)

Instrumentation is one of the major areas of Science & Technology which makes a great impact on vital sectors of national activities such as education, scientific research, industry, agriculture, medicine and health etc. The Department of Science & Technology (DST) has been promoting the area of Instrumentation through its Instrumentation Development Programme (IDP).

The programme focuses on strengthening indigenous capability for research, design, development and production of instruments in the country leading to fulfillment of the following objectives: -:

- Indigenous development and production of instruments,
- Continuous updating of the technology of instruments to keep pace with technology improvements taking place globally, and
- Innovations in the area of instrumentation.

Activities supported under IDP: Programmes to support and sustain development and production of indigenous and affordable instruments are evolved and supported under the IDP. The following types of activities are evolved and supported under IDP:

- a) Project support to scientists and technologists
 - a. The Instrument/technology development programmes are supported with mandatory industry participation so as to facilitate easy absorption of technology and commercial production of the developed instrument/technology.
- b) Project Formulation
 - a. The following activities are supported under IDP for evolving well defined cocoordinated Research & Development projects involving Scientists/Technologists; Industries and Experts:
 - i. Cluster of Projects Meetings on identified Themes in Thrust Areas
 - b. Brainstorming Sessions/Discussion Meetings in Specialized Areas of national importance
- c) Creation of National Facilities

For submission of project proposals and financial assistance:
<http://www.dst.gov.in/scientificprogramme/idp-form.pdf>

For More Details: <http://www.dst.gov.in/scientific-programme/t-d-idp.htm>

Natural Resources Data Management System (NRDMS) (DST)

This programme is a multi-disciplinary and multi-institutional R&D programme of the Department of Science and Technology, aimed at developing methodologies for building and promoting the use of spatial data management and analysis technologies in local area planning. In the context of NRDMS, any natural resource, which is important for local area development, is relevant for study. For developing necessary inputs for local planning strategies, NRDMS is supporting several academic and R & D Institutions with projects specially focusing towards the need of local level planning. Emphasis is being given on spatial data management and analysis technology for natural resources management to carry out R & D related to informatics especially the geo-informatics for finding solutions to local specific problems related to natural resources and provide necessary information to the planners to make objective decisions.

R&D areas of NRDMS:

- Land & Water Management
- Watershed Management
- Natural Disaster Mitigation
- Panchayat Level Resource
- Energy Planning
- Microwave Remote Sensing
- GIS in Local Level development
- Ground Water Studies
- Software Development by R & D Groups

For more on R& D Programs: <http://nrdms.gov.in/programme.asp>

For Project Guidelines/Formats: http://nrdms.gov.in/downloadable_form.asp

Technology Systems Development Programme (DST) The Programme

has two major objectives:

- Development and integration of technologies in identified areas.
- Promote application of advanced technology for improving the performance, value addition and exportability of various products.

Areas Promoted:

- | | |
|--|--|
| <input type="checkbox"/> Glass Technology Upgradation | <input type="checkbox"/> Information and Communication |
| <input type="checkbox"/> Development of Technology for Bio-fuels | <input type="checkbox"/> Technology Systems For |
| <input type="checkbox"/> Structure Technology for Distress | <input type="checkbox"/> Application in Rural Areas |
| <input type="checkbox"/> Diagnostics etc | <input type="checkbox"/> Water Purification |
| | <input type="checkbox"/> Bio-molecular Electronics and |
| | <input type="checkbox"/> Conducting Polymers |

For more details on proposals: <http://www.dst.gov.in/scientific-programme/t-d-jointtechsys.htm>

Science for Equity Empowerment and Development (SEED) (DST)

Science for Equity, Empowerment and Development (SEED) Division has been set up under the Department of Science and Technology, established with the broad objectives of providing opportunities to motivated scientists and field level workers to take up action oriented and location specific projects aiming towards socio-economic upliftment of poor and disadvantaged sections of the society through appropriate technological interventions especially in the rural areas. Under this program efforts have been made to associate concerned National Labs or other specialist S&T institutions with each major program so as to build-in expert input, utilize national S&T infrastructure and link it up with grassroots S&T interventions/initiatives.

For Ongoing & Future Programmes: <http://www.scienceandsociety-dst.org/Programmes.htm>

Guidelines, Terms and Conditions: <http://www.scienceandsociety-dst.org/downloads.htm>

State Science & Technology Programme (DST)

While continuing the catalytic role in encouraging the State Government's initiatives, the department would launch certain programmes of importance identified through various consultations pro-actively. The department would strive to evolve and support certain joint programmes focusing on multi-sectoral area based approach to rural / regional development in co-operation with multiple State & Central Institutions, NGO's and State S&T Councils. These areas would be so identified where S&T intervention could significantly improve the existing socio-economic conditions. Demonstration and Field trials of socially relevant technologies would specially be encouraged. Interaction between State S&T Councils in similar

ecological zone has been initiated and would be promoted further in future to facilitate joint S&T Programme formulation.

DST would welcome proposals having clearly established linkages of S&T to overall development of the state. The area identified should have potential to contribute in socioeconomic upliftment of the people of state. DST encourages formulations of proposals through consultative process and interested organisations are welcome to discuss ideas, concepts, proposed activities etc. relevant to state needs.

Guidelines and Format for Submitting of Project Proposals: <http://www.dst.gov.in/scientificprogramme/call-for-papers/guidelines.pdf>

For Current Proposal visit: http://www.dst.gov.in/scientific-programme/s-t_scst.htm

Department of Biotechnology (DBT)

DBT invites research proposals in prescribed format on various topics. Call for

Proposals: http://dbtindia.nic.in/uniquepage.asp?id_pk=60

Board of Research in Fusion Sciences & Technology (BRFST)

BRFST invites research proposals in prescribed format on various topics.

Forms & Formats: <http://www.nfp.pssi.in/documents/Docs%20for%20new%20projects.rar>

Research areas & More Details: http://www.nfp.pssi.in/documents/research_areas.html

Indo-US Science & Technology Forum (International)

The Indo-US Science and Technology Forum solicits proposals twice per year for activities, events, and initiatives that promote interactions between the scientific and research communities in India and the US. Proposals are peer reviewed in both the US and India, and awards are announced.

Call for proposals & formats: <http://www.indousstf.org/fullstory.aspx?storyheadline=Call%20for%20Proposals&prevmytitle=Call%20for%20Proposals§ionid=S33>

Human Frontier Science Program (International)

HFSP is an international program of research support, funding frontier research on the complex mechanisms of living organisms. Research is funded at all levels of biological complexity from biomolecules to the interactions between organisms. Research grants are provided for teams of scientists from different countries who wish to combine their expertise in innovative approaches to questions that could not be answered by individual laboratories.

Information & Guidelines: <http://www.hfsp.org/funding/research-grants/information-andguidelines>

For More Details: <http://www.hfsp.org/funding/research-grants>

Japan Society for the Promotion of Science (International)

JSPS invites online research proposals in prescribed format on various topics.

For Guidelines & Forms: <http://www.jsps.go.jp/english/e-bilat/call.html>

Wellcome Trust/DBT India Alliance (International)

This scheme supports outstanding researchers of any nationality, either medically qualified or science graduates, who wish to pursue a research career in an academic institution in India. Applicants must have demonstrated their ability to lead an independent research project and group.

For More Details: <http://www.wellcomedbt.org/index.html>

The Leverhulme Trust (International)

The aim of these awards is to provide financial support for innovative and original research projects of high quality and potential, the choice of theme and the design of the research lying entirely with the applicant (the Principal Investigator). The grants provide support for the salaries of research staff engaged on the project, plus associated costs directly related to the research proposed, and the award is paid directly to the institution at which the applicant is employed.

Application Details: http://www.leverhulme.ac.uk/funding/RPG/app_procedure.cfm For More

Details: <http://www.leverhulme.ac.uk/funding/RPG/RPG.cfm>

Indo-French Centre for the Promotion of Advanced Research (IFCPAR) (International)

The primary objective of supporting collaborative research projects between Indian and French scientists is to complement the expertise and strength of high quality research groups in advanced areas of science and technology thereby promoting excellence in science.

For collaborative research projects the following are necessary

1. At least two scientists, one each from India and France as Principal Collaborators
2. Joint Collaborators (2-3) on both sides are welcome, but their contributions to the project may be clearly defined
3. Research project must be on a current topic and can be chosen in any field of science and engineering, including medicine
4. The research topic chosen must complement the strengths and expertise of the research groups.
5. The collaborators must submit the project as per the prescribed format (available under download forms)

Forms & formats: <http://www.cefipra.org/section.aspx?catid=824&langid=1> For more

details: <http://www.cefipra.org/home.aspx?langid=1>

UK-India Education and Research Initiative (UKIERI) (International) UKIERI is now accepting

proposals for the following strand activities:

For details & forms: http://www.ukieri.org/third_call_for_bids_2013-14.html

FUNDING OPPORTUNITIES AT VARIOUS MINISTRIES

(Partial List)

Govt. of India
Development Commissioner (MSME)
Ministry of Micro, Small & Medium Enterprises (MSME)

Scheme for "Building Awareness on Intellectual Property Rights" (IPR) for the Micro, Small & Medium Enterprises (MSME)

INTRODUCTION:

The Government of India has announced in the 2005-06 Budget regarding setting up of the " National Manufacturing Competitiveness Council (NMCC)" which visualized a National Manufacturing Competitiveness Programme (NMCP) to enhance the competitiveness of the SMEs sector. One of the components of the NMCP is "Building Awareness on Intellectual Property Rights (IPR)" for the MSME. Accordingly, to enable the MSME sector to face the present challenges of liberalisation, various activities on IPR are proposed under this scheme. These initiatives will provide MSME sector more information, orientation and facilities for protecting their intellectual powers.

OBJECTIVE:

The objective of the scheme is to enhance awareness of MSME about Intellectual Property Rights (IPRs) to take measure for the protecting their ideas and business strategies. Effective utilisation of IPR tools by MSMEs would also assist them in technology upgradation and enhancing competitiveness

Database On IPR , Please Visit www.ipindia.nic.in

SALIENT FEATURES:

Sl. No.	Activity	Maximum grant per application/proposal (Rs. in lakh)
a	Awareness/ Sensitisation Programmes on IPR.	1.00
b	Pilot Studies for Selected Clusters/ Groups of Industries.	2.50
c	Interactive Seminars / Workshops.	2.00
d	Specialized Training. (i) Short term (ST) (ii) Long term (LT)	(i) ST- 6.00 (ii) LT-45.00
e	Assistance for Grant on Patent/ GI Registration. (i) Domestic Patent (ii) Foreign Patent (iii) GI Registration	(i) 0.25 (ii) 2.00 (iii) 1.00
f	Setting up of 'IP Facilitation Centre for MSME'.	65.00
g	Interaction with International Agencies. (i) Domestic Intervention (ii) International Exchange Programme	(i) 5.00 (ii) 7.50

These initiatives are proposed to be developed through Public-Private Partnership (PPP) mode to encourage economically sustainable models for overall development of MSMEs. Under this programme financial assistance is being provided for taking up the identified initiatives. Eligible applicants/beneficiaries will have to contribute minimum 10% of the Govt financial support for availing assistance under the scheme. The

detail guidelines, eligibility criteria, funding pattern and prescribed format etc. are available on this office web site www.dcmsme.gov.in.

→ [For Guidelines about the scheme please click here](#)

→ [Project Implementation Committee \(PIC\) for Implementation of the Scheme "Building Awareness on Intellectual property Rights \(IPR\)" for MSMEs under NMCP Regd. \(please click here\)](#)



Support For Entrepreneurial And Managerial Development Of SMEs Through Incubators

a) Objectives

The Scheme provides early stage funding for nurturing innovative business ideas (new indigenous technology, processes, products, procedure etc.) which could be commercialized in a year.

The main objective is to promote development of knowledge-based innovative ventures and to improve the competitiveness and survival instincts of the Micro, Small and Medium Enterprises (MSMEs). Such entrepreneurial innovative ideas are sought to be developed in reputed Technical Management institutions before these can become commercially viable and attract venture capital.

The idea is primarily for sustaining, at some basic or introductory level, the incubation of ideas that would have otherwise been lost for want of support. The expectations are that a sizeable percentage of the grantees/incubates would be graduating to higher levels of operation that would then require other form of support under other schemes/organizations including from Venture Capital or Angel Funding.

b) Programme

A total of 100 Business Incubators (BIs) are expected to be set up between 2008-09 to 2011-12 with 25 BIs being made operational in selected technical institutions every year over the entire duration of the four years.

Each BI is expected to help incubation of 10 new ideas or units and is to be given financial assistance between Rs. 4 lakh to Rs. 8 lakh per idea/unit matured subject to an overall ceiling of Rs. 62.5 lakh per incubator, which works out to be Rs. 6.25 lakh per idea/unit on an average.

The technical managerial (Host) institute is expected to make available necessary laboratory/workshop facilities and other required to the young innovators/entrepreneurs. Each BI will make efforts to maintain a ratio of 4:1 between the incubated units catering to micro enterprises and small enterprises respectively. However, flexibility on this account would be permissible with the approval of Technical Approval Committee. Flexibility is also envisaged in having more than one BI in the same host institute and where required/justified, less than 10 or more than 10 hosted units in each BI.

c) Implementation

The Scheme is being implemented in a Public Private Partnership (PPP) mode with expected private participation between 15% (in case of micro enterprises) to 25% (for small enterprises). Suitable proposals are invited from various reputed technical management institutes through approaching them individually and placement of advertisements in leading Newspapers.

The proposals, upon receipt, will be placed before a Technical Approval Committee for scrutiny/evaluation. Subsequently, these will be placed before the Selection Committee, headed by AS&DC (MSME), for final approval. The flow of finance to the Host Institute will commence after entering into the tripartite agreement between the Government, the Host Institute would be released 30 per cent of the expenditure expected to be incurred in the establishment and operation of the incubators with the balance being released in one or more installments, once the earlier amount is reported to have been utilized.

For details of the guidelines of the scheme, application forms and present status of the scheme, Please [Click Here](#)






Department of Electronics & Information Technology (DeitY)

Ministry of Communications & IT, Government of India

[Home](#) · [Research & Development](#)

Schemes and Policies

- [ICT&E R&D and Innovation Framework 2013](#)
- [Technology Incubation and Development of Entrepreneurs Scheme \(TIDE\)](#)
- [Multiplier Grants Scheme \(MGS\)](#)
- [SIP-EIT Scheme](#)
- R&D Funding Scheme
- [PROFORMA FOR SUBMITTING R&D PROJECT PROPOSAL](#) ([Proforma Pdf](#))  ([Proforma Doc](#)) 
- [Terms & Conditions governing Grant-in-aid for funding R&D Projects](#) 

<http://deity.gov.in/content/schemes-and-policies>

Technology Incubation and Development of Entrepreneurs

Department of Electronics and Information Technology (DeitY) is implementing a scheme titled Technology Incubation and Development of Entrepreneurs (TIDE). Initially launched in 2008 the scheme has been revised and extended till March 2017. As per the scheme provision, 27 centres are being supported at academic institutions across India.

TIDE has a multipronged approach in diverse areas of Electronics, ICT and Management. It aims to assist institutions of higher learning to strengthen their Technology Incubation Centers and enable young entrepreneurs to initiate technology startup companies for commercial exploitation of technologies developed by them.

TIDE Incubation Centers provide a gamut of services to new enterprises and facilitate linkages congenial for their survival and growth. The centres network with Angel Investors and Venture Capitalists who provide mentoring and financial support to the startups and enable tenant companies to mature over a period of 2-3 years and ultimately graduate to a commercial place to transact actual business.

DeitY is providing financial and policy support for strengthening technology incubation activities on the premise that this would in the long run result in indigenous development of products and packages in the ICTE sector.

Broad Objectives

- Promote product oriented research and development
- Encourage and accelerate development of indigenous products and packages
- Bridge the gap between R&D and commercialisation
- Facilitate entrepreneurial training and IPR facilitation
- Promote involvement of faculty in startup activities
- Ensure interaction between education and industry
- Alignment of education with exact market demands
- Active involvement of the faculty in the technology start-up activities

Technology Incubation and Development of Entrepreneurs(TIDE):

[Details of Technology Incubation and Development of Entrepreneurs\(TIDE\) Scheme](#) (52 KB)

[List of Technology Incubation and Development of Entrepreneurs\(TIDE\) Centres](#) (13 KB)

[Details of Startups](#) (5.5 MB)

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Multiplier Grants Scheme

Department of Electronics and Information Technology (DeitY) is implementing Multiplier Grants Scheme (MGS). MGS aims to encourage collaborative R&D between industry and academics/ R&D institutions for development of products and packages. Under the scheme, if industry supports R&D for development of products that can be commercialized at institution level, then government will also provide financial support that is up to twice the amount provided by industry. The proposals for getting financial support under the scheme are to be submitted jointly by the industry and institutions.

- Broad Objectives
- Strengthen industry/ institute-linkages
- Encourage and accelerate development of indigenous products/ packages
- Bridge the gap between R&D and commercialization

Multiplier	Grants	Scheme	(MGS)
Details of Multiplier Grants Scheme (MGS) (211			KB)
Invitation of Project Proposals (15.7			KB)
Terms and Conditions Governing Grants (70			KB)
Application form for submission of joint R&D project proposal by the industry and academic/ Government R&D Lab under MGS (106			KB)
IPR/ Royalty Agreement (7			KB)
Sponsored R&D projects under MGS			

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Support for International Patent Protection in Electronics & Information Technology

- Department of Electronics and Information Technology has launched a scheme, Support for International Patent Protection in E&IT to provide financial support to MSMEs and Technology Startup units for international patent filing to encourage innovation and recognize the value and capabilities of global IP along with capturing growth opportunities in ICTE sector. In addition, to sensitize and create IP awareness and to disseminate the scheme among stakeholders, a scheme to support IPR awareness is also proposed as the second component of the scheme.

SIP EIT II comprises of two schemes:

1. Support for International Patent Protection in E&IT

In order to encourage filing of International Patents, a Scheme Support International Patent Protection in Electronics & IT (SIP-EIT) has been put in place. The Scheme Supports International Patent Protection in Electronics & IT by SMEs (Small and Medium Enterprises) and Technology Start-Up Companies.

- [Brochure](#)
- [Guidelines](#)

2. Scheme to Support IPR Awareness Seminars/Workshops in E&IT Sector

Under the scheme, DeitY aims to provide financial support to Education Institutes, DeitY societies, etc. for organizing seminars & workshops on IPR awareness among various stakeholders.

- [Brochure](#)
- [Guidelines](#)

Any query regarding the scheme, can be sent to ipr@deity.gov.in

Modified Guidelines of MSE-CDP

Background

- 1 *The Ministry of Micro, Small and Medium Enterprises (MSME), Government of India (GoI) has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country. A cluster is a group of enterprises located within an identifiable and as far as practicable, contiguous area and producing same/similar products/services. The essential characteristics of enterprises in a cluster are (a) Similarity or complementarity in the methods of production, quality control and testing, energy consumption, pollution control, etc (b) Similar level of technology and marketing strategies/practices (c) Channels for communication among the members of the cluster (d) Common challenges and opportunities.*
- 2 *In October 2007, the erstwhile cluster development scheme 'Small Industries Cluster Development Programme (SICDP)' was renamed as 'Micro and Small Enterprises – Cluster Development Programme (MSE-CDP)'. It was also decided that the 'Integrated Infrastructural Development (IID)' Scheme shall be subsumed in MSE-CDP for providing developed sites for new enterprises and upgradation of existing industrial infrastructure. A comprehensive MSE-CDP is being administered by the office of Development Commissioner (MSME), the Ministry of MSME.*
- 3 *These guidelines for the Micro and Small Enterprises - Cluster Development Programme (MSE-CDP) are issued in supersession of the previous guidelines relating to SICDP and IID schemes and encompass, inter-alia, the procedure and funding pattern for admissible activities, namely:-*
 - (i) **Diagnostic Study Reports:** *To map the business processes in the cluster and propose remedial measures, with a validated action plan.*
 - (ii) **Soft Interventions:** *Technical assistance, capacity building, exposure visits, market development, trust building, etc for the cluster units.*
 - (iii) **Detailed Project Report:** *To prepare a technical feasible and financially viable project report for setting up of a common facility center for cluster of MSE units and/or infrastructure development project for new industrial estate/ area or for upgradation of infrastructure in existing industrial estate/ area/ cluster.*
 - (iv) **Hard Intervention/Common Facility Centers (CFCs):** *Creation of tangible "assets" like Testing Facility, Design Centre, Production Centre, Effluent Treatment Plant, Training Centre, R&D Centre, Raw Material Bank/Sales Depot, Product Display Centre, Information Centre, any other need based facility.*
 - (v) **Infrastructure Development:** *Development of land, provision of water supply, drainage, Power distribution, non- conventional sources of Energy for common captive use, construction of roads, common facilities such as First Aid Centre, Canteen, other need based infrastructural facilities in new industrial (multi- product) areas/estates or existing industrial areas/estates/clusters.*

The projects sanctioned under erstwhile SICDP (renamed MSE-CDP) and Integrated Infrastructural Development (IID) schemes will also be eligible for financial support issued under the scheme as per earlier approvals.

4 **Objectives of the Scheme**

- i. *To support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, access to capital, etc.*
- ii. *To build capacity of MSEs for common supportive action through formation of self help groups, consortia, upgradation of associations, etc.*
- iii. *To create/upgrade infrastructural facilities in the new/existing industrial areas/ clusters of MSEs.*
- iv. *To set up common facility centres (for testing, training centre, raw material depot, effluent treatment, complementing production processes, etc).*

5 **Strategy and Approach:** *Given the diverse nature of the MSEs in terms of both geographical location and sectoral composition, the MSE-CDP scheme aims at addressing the needs of the industries, through well defined clusters and geographical areas. This will enable achieving the economies of scale in terms of deployment of resources as well as focusing on the specific needs of similar industries. The capacity building of associations, setting up of special purpose vehicles (SPVs), consortia, etc. which are integral part of the scheme would enable the MSEs to leverage their resources and also to have better access to public resources, linkages to credit and enhance their marketing competitiveness.*

6 **Diagnostic Study:** *The first and foremost activity in the cluster development process is to conduct a diagnostic study. The objective of conducting diagnostic study in a cluster is to map all the business processes of the cluster units viz. manufacturing processes, technology, marketing, quality control, testing, purchase, outsourcing, etc to find out its strengths, weaknesses, threats and opportunities (SWOT), problems and impediments, suggestions and a well drawn action plan for enhancing competitiveness of the units of the cluster and to position the cluster on a self sustaining trajectory of growth. Diagnostic Study Report (DSR) is very important document and the study should be conducted with special attention. The Study should focus on enhanced competitiveness, technology improvement, adoption of best manufacturing practices, marketing of products, employment generation, etc. There has to be direct linkages between the problems highlighted in the report and the measures suggested for improvement.*

- a. *The DSR should preferably be prepared by the end users and other agencies should only facilitate in preparation of reports. In case the DSR is prepared by other expert agencies other than end users, these reports must be thoroughly discussed with and vetted by the end users and concerned State Government. Such agencies should have relevant expertise in cluster development.*
- b. *Specific needs of the cluster regarding IPRs, Technology Upgradation, Information and Communication Technologies (ICT), Enterprise Resource Planning (ERP), energy efficiency, lean manufacturing, technology benchmarking (international/ national), market potential assessment, skill up-gradation/ certification system, design development, comparative study with other clusters, twining of clusters, need to improve safety, health, business literacy, welfare of workforce by the enterprises and their common bodies, social upliftment, etc. should be examined and included in the DSR.*

- c. *Gol grant of maximum Rs 2.50 lakh will be provided for preparation of DSR for one cluster. For the field organizations of the Ministry of MSME, this financial support will be Rs 1.00 lakh. The cost includes the expenses towards visits to cluster, compilation of data, validation of action plan, hiring of consultant, special studies (if reqd), printing & stationery, etc. 50% of the amount sanctioned will be released after the approval. Balance 50% will be released only after acceptance of report.*
- d. *DSR for one cluster should be prepared within a period of 3 months, unless extended with the approval of DC(MSME).*

7 **Soft Interventions:** *Soft activities under the programme would consist of activities which lead to creation of general awareness, counseling, motivation and trust building, exposure visits, market development including exports, participation in seminars, workshops and training programmes on technology upgradation, etc. These interventions bring about general attitudinal changes necessary to initiate improvement in the existing style of working of the MSEs in the cluster. It is necessary to prepare a Diagnostic Study Report (DSR) including validated action plan, performance indicators/milestones to evaluate the project, before undertaking Soft Interventions. Activities are undertaken as per approved action plan included in DSR.*

- a. *The critical mass in a cluster for effectively realising the demonstrative impact of soft interventions should be maximum but not less than 25 units participating in the cluster development activities. However, for difficult and backward regions and for special entrepreneurs groups having a sizeable presence of Women/SC/ ST/Minorities, the critical mass could be 20.*
- b. *Maximum limit for project cost would be Rs 25.00 lakh per cluster. Indicative details of activities are given in Annex I. Gol grant for the soft interventions will be 75% of the sanctioned amount of the project cost. For NE & Hill States, Clusters with more than 50% (a) micro/ village (b) women owned (c) SC/ST units, the Gol grant will be 90%. The cost of project will be moderated as per size/ turnover of the cluster.*
- c. *The share of the cluster beneficiaries should be as high as possible but not less than 10 per cent of the total cost of Soft Interventions. State Government/ other stakeholders contribution will be considered as gap funding.*
- d. *Funds will be released after getting commitment from the State Government/ Implementing Agencies that required share of the cost of interventions in the cluster is contributed by the cluster actors and other institutions/stakeholders. Funds will be released in two/three installments depending upon the implementation plan, requirements of funds.*
- e. *The duration of soft interventions will be maximum 18 months, unless extended with the approval of Steering Committee.*

8 **Detailed Project Report (DPR):** *A Gol grant of maximum Rs 5.00 lakh will be provided for preparation of a technical feasible and financially viable project report for setting up of a common facility center for cluster of MSE units and/or infrastructure development project for new industrial*

estate/ area or for upgradation of existing infrastructure in existing industrial estate/ area/cluster. 50% of the amount sanctioned will be released after the approval. Balance 50% will be released only after acceptance of report.

- a. The DPR should include financial analysis like internal rate of return, break-even point, debt-service coverage ratio, sensitivity analysis, etc., using basic templates such as projected profit & loss account, projected balance sheet etc. The indicative format for preparation of DPR is given at **Annex 2**.
- b. DPR should be appraised by a bank (if bank financing is involved)/independent Technical Consultancy Organization/ SIDBI.

9 **Hard Interventions (setting up of CFCs):** Hard Interventions under the programme will consist of creation of tangible “assets” as Common Facility Centers (CFCs) like Common Production/Processing Centre (for balancing/correcting/improving production line that cannot be undertaken by individual units), Design Centres, Testing Facilities, Training Centre, R&D Centres, Effluent Treatment Plant, Marketing Display/Selling Centre, Common Logistics Centre, Common Raw Material Bank/Sales Depot, etc.

- a. The Gol grant will be restricted to 70% of the cost of project of maximum Rs 15.00 crore. Gol grant will be 90% for CFCs in NE & Hill States, Clusters with more than 50% (a) micro/ village (b) women owned (c) SC/ST units. The cost of project includes cost of Land (subject to max. of 25% of Project Cost), building, pre-operative expenses, preliminary expenses, machinery & equipment, miscellaneous fixed assets, support infrastructure such as water supply, electricity and margin money for working capital.
- b. The entire cost of land and building for CFC shall be met by SPV/State Government concerned. In case existing land and building is provided by stakeholders, the cost of land and building will be decided on the basis of valuation report prepared by an approved agency of Central/State Govt. Departments/FIs/Public Sector Banks. Cost of land and building may be taken towards contribution for the project. CFC can be set up in leased premises. However, the lease should be legally tenable and for a fairly long duration (say 15 years).
- c. It is necessary to form an SPV prior to setting up of and running the proposed CFC. An SPV is a clear legal entity (Cooperative Society, Registered Society, Trust or a Company) with evidence of prior experience of positive collaboration among its members. The SPV should have a character of inclusiveness wherein provision for enrolling new members to enable prospective entrepreneurs in the cluster to utilise the facility should be provided. In addition to the contributing members of the SPV, the organizers should obtain written commitments from ‘users’ of the proposed facilities so that its benefits can be further enlarged. Bylaws of SPV should have provisions for CDE/ CDA and one State Govt official as members of the SPV.
- d. There should be a minimum of 20 MSE cluster units serving as members of the Special Purpose Vehicle (SPV). There is no ceiling on the maximum number of members. In special cases, where considerations of investments, technology or small size of the cluster warrant lesser number of units, a minimum of 10 MSE units may be considered for the SPV.

- e. *The share of the cluster beneficiaries should be as high as possible but not less than 10 per cent of the total cost of CFC. State Government contribution will be considered as gap funding. All the participating units should be independent in terms of their financial stakes and management. No single unit will hold more than 10 per cent in the equity capital (or equivalent capital contribution) of the SPV.*
- f. *Large mother manufacturing firms (whether in the public or private sector), other major buyers of the cluster MSE products, commercial machinery suppliers, raw material suppliers and business development service (BDS) providers will be eligible to contribute up to 49 per cent for SPV, provided management of SPV remains clearly with the intended beneficiary SPV. The SPV may also raise loans from banks to take care of any shortfall, expansion, etc. on the condition that the plant and machinery in the CFC purchased with Government assistance will not be hypothecated and the first right thereto will rest with the Government.*
- g. *Contribution by the SPV/State Government or the beneficiaries' share should be made upfront. Necessary infrastructure like land, building, water and power supply, etc must be in place or substantial progress should have been made in this regard before Gol assistance is released. Where bank finance is involved, written commitment of the bank concerned to release proportionate funds will also be necessary before release of Gol assistance.*
- h. *The CFC may be utilized by the SPV members and as also others in the cluster.*
- i. *The CFC should be operationalised within two years from the date of final approval, unless extended with the approval of Steering Committee.*
- j. *Escalation in the cost of project above the sanctioned amount, due to any reason, will be borne by the SPV/ State Government. The Central Government shall not accept any financial liability arising out of operation of any CFC.*
- k. *User charges for services of CFC shall be close to prevailing market prices, as decided by the Governing Council of the SPV. The SPV members may be given reasonable preference in user charges.*
- l. *The CFC with cost higher than Rs 15.00 crore may also be considered under MSE-CDP. However, the Gol grant will be calculated with project cost ceiling of Rs 15.00 crore.*
- m. *Funds will be released in two/three installments (after final approval) depending upon the implementation plan, requirements of funds.*
- n. *A Tripartite Agreement among the Gol, the State Government concerned and the SPV shall be signed for CFC projects. The format of the agreement is given at **Annex 3**.*
- o. **Exhibition Centres by Associations of Women Entrepreneurs:** *The Gol assistance shall also be available to Associations of Women Entrepreneurs for establishing exhibition centres at*

central places for display and sale of products of women owned micro and small enterprises @ 40% of the project cost. The Gol contribution will be towards furnishings, furniture, fittings, items of permanent display, miscellaneous assets like generators, etc.

- 10 **Infrastructure Development:** Infrastructure Development projects under the scheme will consist of projects for infrastructural facilities like power distribution network, water, telecommunication, drainage and pollution control facilities, roads, banks, raw materials, storage and marketing outlets, common service facilities and technological backup services for MSEs in the new/ existing industrial estates/areas.
- a. The location of the Projects should be close to district / block / taluka headquarters or any other development projects with access to the following basic facilities :-
 - i. Proximity to railway stations / state highways to facilitate transport of raw material to, and finished material from the Project;
 - ii. Availability of water supply and adequate source of power supply. The power position should be reflected in the detailed project report;
 - iii. Telecommunication facilities;
 - iv. The location selected should not create any ecological imbalance by disturbing environment;
 - v. The workers in the project should not be made to travel for more than 8-10 kilometers from their dwelling places;
 - b. The Gol grant will be restricted to 60% of the cost of project of Rs 10.00 crore. Gol grant will be 80% for projects in NE & Hill States, industrial areas/ estates with more than 50% (a) micro (b) women owned (c) SC/ST units. Details of components for new site development are given at **Annex 4**. For existing clusters, upgradation proposals will be based on actual requirements.
 - c. The State/UT Governments will provide suitable land for the Projects. In estimated cost to set up a project under Infrastructure Development projects of Rs.10.00 crore (excluding cost of land), Central Government will provide grant-in-aid. The remaining amount may be loan from SIDBI/Banks/Financial Institutions or equity from State/UT Government. The State/UT Governments will meet the cost in excess of Rs.10.00 crore or any escalation in cost.
 - d. The project should be completed within two years from the date of final approval, unless extended with the approval of Steering Committee.
 - e. Second/ subsequent project in a district will be considered only if the sites developed in the earlier project (s) have been allotted.
 - f. Funds will be released on reimbursement basis or on matching share basis (Implementing Agency will deposit its share in the dedicated bank account in the name of project and submit a bank certificate). 1st installment limited to Rs. 2 crore only.

- g. *State/UT Governments may constitute State Level Committees to coordinate and monitor the progress of implementation of the Projects, with representatives from O/o DC (MSME), SIDBI, Lead Bank, etc.*
- h. **Other Conditions:**
- i. *Construction of sheds/structures shall not be taken up under the scheme. Sheds/structures will be built by the entrepreneurs according to their needs.*
- ii. *Suitable land endowed with infrastructural facilities like water, electricity, communication and nearness to “mandis” should be selected.*
- iii. *There should be forward and backward linkages between agriculture and industry. Efforts should be made to use local resources both men and material.*
- iv. *Any change in the layout plan should be got approved by DC (MSME).*

11 **Implementation Agencies:**

Activity	Implementing Agency
<i>Diagnostic study</i>	<ul style="list-style-type: none"> • <i>Offices of the Ministry of MSME</i> • <i>Offices of State Governments</i> • <i>National and international institutions engaged in development of the MSE sector.</i> • <i>Any other institution/agency approved by the Ministry of MSME</i>
<i>Soft Interventions</i>	
<i>Setting up of CFC</i>	
<i>Infrastructure Development projects</i>	<i>State/UT Governments through an appropriate state government agency with a good track record in implementing such projects.</i>

12 **Project Approval:** *The proposals under the scheme will be considered for approval by the Steering Committee of the MSE-CDP. Constitution of the Steering Committee will be:*

- i. *Secretary (MSME) - Chairman*
- ii. *AS&DC(MSME)*
- iii. *AS&FA*
- iv. *Adviser (VSE), Planning Commission*
- v. *Joint Secretary, Ministry of MSME*
- vi. *Representative of SIDBI*
- vii. *ADC/ JDC / Director – Incharge of the scheme – Member Secretary*
- viii. *Representative(s) of concerned Industry Association(s)*
- ix. *Special invitees (financial institutions, programme management service provider, Representative of appraisal agency etc.)*

12.1 *Proposals for DSR, DPR and Soft Interventions will be approved in one stage only.*

12.2 *Hard interventions (CFC) and infrastructure development projects will be approved in two stages: In-principle approval and final approval.*

12.2.1 **In-principle approval:** *All the proposals should be sent to the office of DC (MSME) through concerned state government. However, institutions of the Ministry of MSME may send proposals for soft interventions/ DSR/DPR directly to the Office of DC (MSME). In case of infrastructure development projects/DPR thereof, State government will submit the proposal to the office of DC (MSME). Office of DC (MSME) may take assistance of Project Management Service Providers (PMS) for examining of the proposals before considering them for approval. In-principle approval shall be valid for a period of 6 months, and before that it is expected that the project would be ready for final approval. In case, final proposal is not received in 6 months, it will automatically lapse, unless it is specifically extended by the steering committee.*

12.2.2 **Final Approval:** *The projects which have been accorded in-principle approval, shall be accorded final approval on fulfillment of following conditions:*

i Common Facility Center (CFC)

a *Formation of SPV and Trust building. Role and functions of the SPV should be defined. b Land procured and registered in the name of SPV c Submission of appraised Detailed Project Report (DPR).*

d *Details of the share holding of the SPV*

e *Project Specific account in Schedule A bank*

ii Infrastructure Development Projects a *Submission of appraised DPR with approved layout plan.*

b *Confirmation of availability of suitable land of the requisite size endowed with infrastructural facilities like water, electricity, communication etc. The land should be in possession in the name of the Implementing Agency (IA) with Clear Title and complying with Zoning regulations and non-agricultural conversion etc*

c *Constitution of State Level Committee to coordinate and monitor the progress of implementation of the Projects*

13 **Programme Management Service Providers (PMS):** *Considering the unorganized and micro / small scale nature of enterprises and the need for very extensive project development efforts, especially for industrially backward regions office of DC (MSME) with the approval of the Steering Committee, may appoint competent Programme Management Service Providers (PMS) for facilitating formation of various proposals and their implementation. PMS would act as a link between DC (MSME) and the industry/ state government and would help in efficient and speedy roll out of the Scheme. Office of DC (MSME) will identify, select and prepare a panel of PMSs. The PMS shall report directly to the office of DC (MSME).*

13.1 *Service charges for the PMS shall be paid from within the approved budget outlay of the scheme.*

13.2 *The PMS will have the following responsibilities:*

- a Sensitisation and awareness creation about the scheme
- b Identification of need for soft and hard interventions and formulation of suitable proposals
- c Assist state governments/ industry associations / groups of entrepreneurs / other stakeholder/ agencies in conceptualizing projects and preparing comprehensive proposals / DPRs.
- d Assisting the identified entrepreneurs in establishment and structuring the project specific SPV
- e Assist office of DC(MSME) in examining the proposals for inprinciple and final approval.
- f Assist SPVs in selection of agencies / experts for various services and in developing suitable operational framework for CFC
- g Assist in periodical monitoring of the progress of the projects and disbursement of funds
- h Provide need based advisory services to the office of DC (MSME) and assist in strategy formulation for effective implementation of the scheme

14 **Monitoring and Evaluation:**

- 14.1 The Development Commissioner (MSME) will be the apex body for coordinating and overseeing the progress of the projects.
- 14.2 In case of projects implemented by the State Governments, their autonomous bodies and SPVs, monitoring of the projects will be the responsibility of the State Governments concerned to ensure satisfactory and time-bound implementation of the activities. Each State Government will also be required to constitute a Project Steering Committee under the chairmanship of Secretary or Director of Industries and consisting of representatives of all stakeholders for this purpose.
- 14.3 In case of cluster development projects not covered as above, the office of DC(MSME) will directly monitor the progress with the assistance of or through its field level offices.

15 **Miscellaneous Provisions**

- 15.1 **Monitoring and Management Expenses:** At present, interventions are being undertaken in more than 400 clusters. Project monitoring and management @ 2 % of the total budget outlay for the sanctioned funds will be utilized, mainly at the office of DC (MSME) for
 - i. Preparation of panels of PMS/ experts/ expert agencies for preparation of DSRs, DPRs, agencies involved in cluster development, etc
 - ii. Development of customized software for data management, specialized reports and monitoring & evaluation
 - iii. MSE-CDP related communication and stationery expenses
 - iv. Travel/ exposure visits of the cluster cell officials in the Office of DC (MSME) for monitoring MSE-CDP activities
 - v. Organizing of meetings including steering committee ones
 - vi. Purchase of office automation equipment like photocopier, maintenance etc
 - vii. Outsourcing of data management services
- 15.2 **National Level Miscellaneous Activities:** Activities (like organizing training/ national workshops, publishing of cluster related material, preparation of study material, deputation

of officers from headquarters, special studies, etc.), setting up of and supporting Resource Centers, which are not part of cluster specific action plans, but are directly connected with the promotion of the scheme and duly approved by the Steering Committee subject to 5% of the total cluster development budget in a particular year, will also be permitted. Training will also be imparted to the Implementing Agencies, SPVs, and other stakeholders as and when required.

15.3 **Cluster development through International Agencies:** *The interventions criteria/ proposal format for cluster development through International agencies like UNIDO, GTZ, DFID etc do not match with that of the MSE-CDP. However, sometimes it is required to join hand with such agencies with necessary international expertise for development of clusters on national/ regional level. Contribution for*

such programmes may be considered by the Steering Committee in relaxation of the prescribed norms.

Annex I
Proposed Budget (Indicative)* and Means of Finance for Soft Interventions
(per cluster spread over a period of 18 months) (Rs in lakh)

S No.	Description	Max Estimated Expenditure	Means of Finance		
			Govt assistance	State Govt. &/or PSU, Institutions	SPV/ Private Partners
1.	Trust building (organizing meetings, seminars for cluster actors) 4 meetings	0.80	upto 90%		
2.	Building awareness of various schemes of Ministry of MSME, other Ministries and Departments of State & Central Govt, other developmental agencies, Financial institutions etc (2 programmes)	0.80	upto 90%		
3.	Organizing training programmes /seminars /workshops/ study tours to other clusters/ demonstration of technology/ equipment, including expert fees, travel, lodging, boarding, etc. (Total upto 6 programmes @ Rs.1.00 lakh)	6.00	upto 80%		
4.	Capacity building (exposure visits, benchmarking, brochure preparation, web-site launching, initial recruitment cost, etc.)	1.00	upto 60%		
5.	Services of BDS providers, (max 20 person-days @ Rs 7000/- per day + boarding/lodging charges as per Group A officer's entitlement)	3.00	upto 90%		
6.	Participation in one foreign fair (for entrepreneurs in clusters). One fair per cluster.	5.00	50%		
7.	Miscellaneous developmental costs (translation, publications-lump sum)	1.50	upto 80%		
8	In-house institutional Staff:				
	a CDA (if required) -18 month @ Rs.30000 pm	5.40	upto 50%		
	b Local Organizer/NDA-18 month @ Rs.20000 pm	3.60	upto 50%		
9	Local travel in the cluster of the inhouse staff and Telecommunications expenses (Rs 5000 per month)	0.90	100%		

13.	Local purchases (computer, telephone, fax-lump sum, year-wise), if required	0.75	100%		
15	Participation of CDE/CDA/ cluster official along with entrepreneurs of the cluster. economy/ excursion fair + TA	1.25	100%		

NB *Maximum limit for project cost would be Rs 25.00 lakh per cluster. Overall funding pattern will be guided by the details given in para 7b.*

After approval of the action plan, changes in the sub-heads up to 25% of the approved amount within the total budget may be allowed with the permission of Director, MSME-DI / DC (MSME).

** All the activities mentioned above may not be required in all the clusters. Actual action plan and budget must be prepared on the basis of requirements of the cluster and in close liaison and consent of the cluster beneficiaries/ users body.*

Annex 2 Format of Detailed Proposal for CFC

I The basic details/documentation

- i. Name and location of the cluster ii. Nature of activity and products
- iii. Number and size (also in terms of installed capacity) of units iv. Scale of investment (also in terms of net fixed and important current assets)
- v. Value of output in the last 5 years (different enterprise segment - wise), including export output, if any
- vi. Projected performance of the cluster after proposed intervention (in terms of production, export/domestic sales and direct/indirect employment, etc.)
- vii. Diagnostic study/comparative advantage benchmark survey (main findings)
- viii. Information on nature of critical gaps identified (such as poor storage facility, poor testing and quality control facilities-item-wise cost estimates)
- ix. Implementation schedule; structuring of the SPV, such as copy of certificate of incorporation, articles of association and letter of agreement with stakeholders
- x. Revenue generation mechanism for sustainability of assets (service/user charges to be levied, any other-to be specified)
- xi. Project highlights--total cost of project, contribution from cluster enterprises/stakeholders, average contribution by individual enterprises, grant in aid under MSE-CDP, term loans, debt-equity ratio, repayment schedule and estimated debt service coverage ratio (DSCR), annual estimated income, expenditure, gross and net profit at expected/optimal levels of operations, break even (BE)/internal rate of return (IRR) calculations, payback period, etc.
- xii. In-principle sanction of loan from a bank, if applicable
- xiii. Previous track record of co-operative initiatives pursued by SPV members need to be highlighted with support documentation
- xiv. CFC may be utilised by SPV members as also others in a cluster. However, evidence should be furnished with regard to SPV member ability to utilise at least 60 per cent of installed capacity.

2. Elements of DPR

2.1 Plant and machinery

(a) List of Plant and Machinery

Sr. No.	Particulars of plant and machinery	No.	Power requirement (HP/KW)	F.O.R. Price (Rs)	Name of proposed suppliers	Delivery Schedule (monthwise)

Note: Add central sales tax, packing and forwarding charges (2%), transit insurance (1%), and freight (2%) to costs or actuals.

(b) Capacity of plant and machinery on single shift basis

(c) Production pattern

2.2 Annual requirement of raw materials and consumables at 100% capacity utilization

Sr. No.	Particulars of raw material	Specifications/ indigenous/ imported	Quantity required at full capacity	Unit price (Rs.)	Total value (Rs.)

2.3 Utilities and services at full capacity utilization

(a) Power for industrial purpose

Sr. No.	Particulars of the machinery	KW	No. of working hrs. per month	KW/month	Rs./ KWH	Total

(b) Power requirement for commercial/ domestic purpose

(c) Water

(d) Gas/Oil/ Other utilities

2.4 Site Development and civil construction

	Particulars	Quantity/ nos	Rate	Cost
i	Cost of land			
ii	Development cost of land			
iii	Cost of compound wall			
iv	Cost of fabricated gates & grills			
v	Cost of shed			
vi	Cost of laboratory			
vii	Other RCC construction			
ix	Water tank/ Overhead water tank			
	Total			

2.5 Organizational set up and man power requirement

Sr. No.	Category/ Designation	No. of persons	Salary per month (Rs)	Total salary (PM)

Note: Add 25% towards fringe benefits and 5% annual increment

2.6 Project cost

	Particulars of cost	Amount (Rs.)
(i)	Land & site development	

(ii)	Building	
(iii)	Plant and machinery (cost of plant and machinery, 10% installation, electrification and commissioning)	
(iv)	Misc. fixed assets (fixture, furniture, fire fighting equipment, first aid equipment, back up power supply, etc.)	
(v)	Preliminary expenses (diagnostic study, DPR, legal & administrative expenses, telephone, stationery, etc.)	
(vi)	Pre-operative expenses (establishment, travel, interest on borrowings, committed charges during construction period, start up expenses, etc.)	
(vii)	Provision for contingencies (2% building and 5% on plant and machinery)	
(viii)	Margin money for working capital	
	<u>Total</u>	

2.7 Means of finance

Sr. .No.	Agency	Amount (Rs. lakh)	% of the project cost
1.	SPV		
2.	GoS		
3.	Gol		
4.	Bank Borrowings		
5.	Others		
	<i>Total</i>		

2.8 Working capital and margin money (actual capacity utilisation year wise)

Sr. No.	Particulars	No. of months	Margin	as per capacity utilisation		
				1 st year	2 nd Year	3 rd year
1.	Raw material and consumables					
2.	Utilities	1				
3	Working expenses (salary of manpower)	1				
4.	Works in process (cost of raw material, utility and salary on actuals)					

5.	Stock of finished goods (cost of raw material, utility, salary, factory overheads on actuals)					
6.	Bills receivables (Sales value)					
	Total					

2.9 Cost of production (Projection for 10 years of operation in tabular form)

- (i) Raw materials and consumables
- (ii) Utilities
- (iii) Wages and salary
- (iv) Repairs and maintenance
- (v) Insurance
- (vi) Administrative and factory overheads
- (vii) Selling expenses

2.10 Estimation of profitability (projections for 10 years of operation in tabular form)

- (i) Installed capacity
- (ii) Number of working days (single shift basis)
- (iii) Capacity utilization
- (iv) Production (in single unit)
- (v) Sales realisation
- (vi) Cost of production
- (vii) Gross profit [(v)-(vi)]
- (viii) Financial expenses
 - (a) Interest on bank borrowing
- (ix) Depreciation on written down value method (as per separate schedule to be attached for different categories of fixed assets)
- (x) Preparatory expenses not written off
- (xi) Operating profit [(vii) – {(viii) + (ix) + (x)}]
- (xii) Tax vide separate schedule
- (xiii) Profit after tax [(xi) – (xii)]
- (xiv) Available surplus [(xiii) + (ix)]

2.11 Cash flow statement (projections for 10 years in tabular form)

(A) Sources of fund:

- (a) Gross profit less depreciation
- (b) Term loan
- (c) Subsidy/Grant
- (d) Promoter's contribution
- (e) Increase in bank borrowings
- (f) Depreciation

(B) Disposal of funds:

- (a) Preliminary & pre-operative expenses

- (b) *Capital expenditure*
- (c) *Increase in working capital*
- (d) *Interest on term loan*
- (e) *Interest on bank borrowings*
- (f) *Decrease in term loan*
- (g) *Taxes*

- (C) *Opening balance of cash in hand or at bank [sum total of {(A)-(B)}]*
- (D) *Net surplus/Deficit*
- (E) *Closing balance of cash in hand or at bank*

2.12 *Debt Service coverage ratio (Projections for 10 years)*

$$\text{DSCR} = \frac{\text{Net Profit} + \text{Interest(TL)} + \text{Depreciation}}{\text{installment(TL)} + \text{Interest(TL)}}$$

2.13 *Balance sheet & P/L account (projection for 10 years)*

FixedCost

$$2.14 \text{ BreakEvenPoint} = \frac{\text{FixedCost}}{\text{Contribution(Sales} - \text{VariableCost)}}$$

3 Commercial Viability: *Following financial appraisal tools will be employed for assessing commercial viability of the project:*

- (i) **Return on Capital Employed (ROCE):** *The total return generated by the project over its entire projected life will be averaged to find out the average yearly return. The simple acceptance rule for the investment is that the return (incorporating benefit of grant-in-aid assistance) is sufficiently larger than the interest on capital employed. Return in excess of 25% is desirable.*
- (ii) **Debt Service Coverage Ratio :** *Acceptance rule will be cumulative DSCR of 3:1 during repayment period.*
- (iii) **Break-Even (BE) Analysis:** *Break-even point should be below 60 per cent of the installed capacity.*
- (iv) **Sensitivity Analysis:** *Sensitivity analysis will be pursued for all the major financial parameters/indicators in terms of a 5-10 per cent drop in user charges or fall in capacity utilisation by 10-20 per cent.*
- (v) **Net Present Value (NPV):** *Net Present Value of the project needs to be positive and the Internal Rate of return (IRR) should be above 10 per cent. The rate of discount to be adopted for estimation of NPV will be 10 per cent. The project life may be considered to be a maximum of 10 years. The life of the project to be considered for this purpose needs to be supported by recommendation of a technical expert/institution.*

Annex 3

Format for Tripartite Agreement among Special Purpose Vehicle (SPV), State

Government and Government of India under MSE-CDP

This agreement is made at on this theth day of 20.... between (1) the President of India, acting through and represented by Joint Development Commissioner /Director in the Office of the Development Commissioner (MSME), the Ministry of Micro, Small & Medium Enterprises (MSME), New Delhi (hereinafter after referred to as the 'Gol'), (2) Governor/Lt. Governor of the State/Union Territory of acting through and represented by Secretary (Industries), State/UT Government of (hereinafter referred to as the 'GoS') and (3)..... Special Purpose Vehicle (SPV) having its registered office at..... represented by its Managing Director/Chief Executive Officer (hereinafter referred to as the 'SPV').

WHEREAS the Gol has introduced a scheme named as "Micro and Small Enterprises- Cluster Development Programme (MSE-CDP)" with the objective of capacity building of micro and small enterprises (including small scale service and business entities) and their collectives in the country;

AND WHEREAS the SPV has been created and constituted as a partnership firm/trust/ society/co-operative society/company, inter alia, to create, establish, run and maintain a Common Facility Centre at(the CFC) for the use and benefit of its members and of other units engaged or coming up in the same industry, trade or vocation in theof(the Cluster);

AND WHEREAS the SPV has submitted a project for approval of the Gol under the MSE-CDP;

AND WHEREAS the Gol has approved the project submitted by the SPV subject to the conditions mentioned in the sanction letter no..... dated (or to be issued) which shall be deemed to be a part of this Agreement and the GoS has also agreed to contribute towards the cost of establishment of the CFC;

AND WHEREAS for binding the Parties to their respective obligations and to ensure long term use of the CFC by the enterprises in the Cluster, the Parties are desirous to enter into an agreement;

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:-

1. The SPV shall set up the CFC at..... on a piece of land to be provided by it free of all encumbrances and charges.
2. The SPV shall contribute to the cost of establishment of the CFC from its resources to the extent and in the form as laid down in the Sanction Letter.
3. The Gol and the GoS shall, on satisfactory proof of the contribution by the SPV, make their respective contributions towards the cost of establishment of the CFC, at such time, in such manner and to such extent as laid down in the Sanction Letter.
4. The establishment of the CFC, including civil works, if any, shall be completed by the SPV within one year of the receipt of the Sanction Letter, or such extended time as the Gol may, on its satisfaction as to the reasons of delay, grant.

5. *The SPV shall be exclusively responsible for the day-to-day running of the CFC. The aim of running the CFC shall be to provide common services to the enterprises in the Cluster at affordable cost as well as to generate enough income to meet all its running expenditure, depreciation and provision for replacement/expansion of capital assets. However, any shortfall or excess of income over expenses shall be kept or borne by the SPV only.*
6. *The disbursement of funds by the Gol will be made only after the upfront contribution to be made by the SPV, the State Government or the beneficiaries.*
7. *Further, the SPV/implementing agency will ensure that necessary infrastructure like provisioning of land and building including water and power supply for CFC is completed before they approach Gol for release of its share.*
8. *Pending utilization of Gol grant, the funds will be parked in a separate dedicated account created for this purpose. Interest accrued, if any, on unutilized fund shall be adjusted against future disbursement under the scheme.*
9. *Gol will reserve the right to carry out physical verification of the assets acquired with the funds or initiate any other enquiry as it may deem fit to satisfy the competent authority with regard to the proper utilization of the funds released.*
10. *The SPV shall furnish utilization certificates for amounts released as grant-in-aid duly verified by the statutory auditors.*
11. *The GoS will act as a facilitator to supervise and evaluate the progress of the project separately. The GoS will also inform the Gol about the status of the establishment or running of CFC and shall also report to the Gol for any discrepancies in its management or otherwise.*
12. *All plant, machinery, fixtures or equipment procured for the purpose of the CFC out of or with the support of the Gol or GoS grant shall be the exclusive property of the GoS, though in the custody and use of the SPV.*
13. *The SPV shall, at its own cost, insure and keep insured all the plant, machinery, fixtures and equipment of the CFC for a minimum period of 10 years. In case of loss of or damage to such plant, machinery, fixtures and equipment, etc., the insurance monies shall be payable to the GoS.*
14. *The SPV shall observe all the conditions and stipulations of the Sanction Letter.*
15. *The management of the SPV and the operation of the CFC shall be in accordance with the Gol Guidelines dated, which shall be deemed to be a part of this Agreement.*
16. *The SPV shall keep all monies not immediately required in interest bearing deposits with any Scheduled Bank in India.*
17. *In the event of any liquidation or bankruptcy proceedings or any threatened distress action against the SPV or any of its assets all plant, machinery, fixtures and equipment procured for the purpose of the CFC out of or with the support of the Gol or GoS grant shall be outside such proceedings and the Gol may assume the control and management of the SPV and appoint any of its officer or officer of the GoS or any semi-government or nongovernment body to run the CFC.*
18. *The SPV represents and warrants:*
 - A. *That it has been duly constituted under the law as applicable and has full authority to enter into this Agreement.*
 - B. *That this agreement is binding upon it in all its provisions.*
 - C. *That it shall work on mutual co-operation basis on sound managerial and business principles and no managerial changes shall be made which may adversely affect the smooth functioning of the CFC.*
 - D. *That it shall keep all the plant, machinery, fixtures and equipment in good working order and shall undertake all preventive and remedial maintenance and upkeep and maintain insurance.*

- E. *That the plant, machinery, fixtures and equipment procured out of or with support of the Gol and GoS grant, is the property of GoS and the SPV shall not sell, hypothecate, mortgage, charge or create any encumbrances against the said plant, machinery, fixtures and equipment or any part of it in favour of any person, for any reason or transaction.*
 - F. *That the SPV shall follow the directions of the Gol and GoS, as may be issued from time to time for better management of the SPV or the better running of the CFC.*
 - G. *That the SPV acknowledges that the MSE-CDP provides for only one time grant towards capital cost of establishing the CFC and no subsidy/grant/assistance is envisaged for the recurring expenses or for replacement, renovation or expansion of the capital assets.*
 - H. *In the event it is found that the SPV has not utilized the amount of grant, or any part of it, for the setting up of the CFC or has subsequently sold or otherwise disposed of any of the assets of the CFC acquired out of the grant, the Gol, without prejudice to any other rights, shall be entitled to recover the amount of loss as arrears of land revenue from the SPV and / or persons connected with its management jointly and severally.*
19. *In case of any disputes or differences arising from, in relation to or in connection with this Agreement and not otherwise provided for in the succeeding clause, shall be settled by arbitration through reference to a sole arbitrator nominated by the Secretary, Department of Legal Affairs, Government of India, New Delhi (the Law Secretary). The provisions of the Arbitration and Conciliation Act, 1996 shall apply to the arbitration proceedings. Courts in Delhi shall have exclusive jurisdiction in all the matters.*
 20. *In case of violation of the stipulated conditions or non observance of the Sanction Letter or the Gol Guidelines by the SPV which is not cured within 15 days of issue of notice by the Gol, the Gol in consultation with the GoS, may, for such time as it may think proper, assume the management of the SPV or delegate the same to the GoS, or a semi-government or non-government body, to assure proper functioning of the CFC. The decision of Gol in this regard will be final. In such event the SPV shall have no claims for any investment made in the CFC or its management.*
 21. *The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of the remaining provisions, which shall remain in full force.*
 22. *Failure or delay on the part of Gol in insisting upon strict performance by the SPV or in taking action against the SPV, or grant of time or any other indulgence by the Gol, shall not be deemed to be waiver of any breach nor waiver on any occasion of breach shall be deemed to be a waiver for other occasions or other breaches.*
 23. *No amendment to this agreement shall be valid unless expressed in writing and duly signed by all the Parties.*
 24. *This agreement does not constitute any partnership of the Gol or the GoS with the SPV and the Gol and the GoS shall not be responsible for any act, omission, negligence, etc. of the SPV or its employees, agents or contractors or any injury suffered or claim made by any person in respect of the working of the CFC.*
 - 1) *Government of India, Represented by Shri.....*
 - 2) *State/UT Government, Represented by Shri.....*
 - 3) *Special Purpose Vehicle Represented by Shri.....*

SECRET

No. 1(17)/SICDP/Clusters/TM-2006

Government of India

Ministry of Micro, Small & Medium Enterprise (MSME)

Office of the Development Commissioner (MSME)

Annex 4**Details of Project Cost for Infrastructure Development for New Sites**

S. No.	Items	Rs. lakh
1.	Land Development and other overhead Infrastructure	
	i. Cost of land filling/leveling including boundary ball / fencing	100
	ii. Cost of laying roads	200
	iii. Road side greenery & social forestry	10
	iv. Water supply including overhead tanks, and pump houses	110
	v. Water harvesting	10
	vi. Drainage	60
	vii. Power (Sub-Station and distribution net-work work including Street light etc), Generation of nonconventional energy	250
	viii. Others (Sanitary Conveniences etc.)	10
	Sub Total	750
2.	Administrative and Other Services Complex	
	i. Administrative Office Building	20
	ii. Telecommunication /Cyber Centre/ Documentation Centre	20
	iii. Conference Hall/ Exhibition centre)	30
	iv. Bank/ Post Office	20
	v. Raw material storage facility, Marketing outlets	40
	vi. First Aid Centre, Crèche, Canteen facilities	20
	Sub Total	150
3.	Effluent Treatment Facilities	80
4.	Contingencies & Pre-operative expenses	20
	GRAND TOTAL	1000

National Centre for Biological Science

Research Development Office

Grants for independent researchers

The Research Development Office has developed a database of currently available funding opportunities primarily for Indian researchers. This database is constantly being updated. Although most of the available funding comes from the Government of India, there are many other opportunities from India and overseas that can be applied for.

The table below lists funding opportunities for independent researchers. These include personal Fellowships, (tenable in India and abroad) mechanisms for funding independent research, infrastructure, International collaborations, International exchange, organization of workshops/seminars and travel.

Click [here](#) to download the Excel format of database with more details. The filter tool can then be used to search against various categories.

This information was last updated on 20- August-2015.

Personal Support (Tenable in India)				
Agency	Scheme	Eligibility	Deadline	Duration
British Petroleum (BP)/Bird life International/Conservation International/Fauna and Flora international/Wildlife conservation society	Conservation Leadership Programme (CLP)-Kate Stokes Memorial Award	Team based projects for individuals from developing countries who are early in their conservation career and demonstrate leadership potential	Expected in early October	
DBT	Tata Innovation Fellowship	Age less than 60 years. employment at a research institute.	21-Nov-15	3 years with possibility of 2 year extension
DBT	Ramalingaswamy Re-entry Fellowship	PhD/Mtech/MD	28-Feb-16	5 years
DST	Ramanujan Fellowship	PhD/MD with excellent proven track-record. Age less than 60 years.	Rolling programme	5 years
DST	J C Bose national Fellowships	PhD, less than 60 years. Needs to be nominated by the institute	Rolling programme	5 years

DST	Swarnajayanti Fellowships	PhD, Age 30-40 years	To be announced	5 years
International Brain Research Organisation (IBRO)	Return home Fellowship	Scientists who are developing a successful basic/clinical research career in a developed country and wish to return to their country of origin or to a less developed country	1-Sep-16	
Lady Tata Memorial Trust	Young Researcher Award	Strong scientific leadership with more than 10 years experience running an independent lab	15-Jan-16	3+2 years based on review of progress
Wellcome Trust-DBT India Alliance	Margdarshi Fellowship	Strong scientific leadership with more than 10 years experience running an independent lab	To be announced	5 years
Wellcome Trust-DBT India Alliance	Intermediate Research Fellowship	4-7 years PD experience	To be announced	5 years
Wellcome Trust-DBT India Alliance	Senior Research Fellowship	7-15 years PD experience	To be announced	5 years
Wellcome Trust-DBT India Alliance	Intermediate Fellowships for Clinicians and Public Health Researchers in India	4-7 years of post-MD/post-MS/post-MPH/post-PhD or equivalent research experience	To be Announced	5 years
Wellcome Trust-DBT India Alliance	Senior Fellowships for Clinicians and Public Health Researchers in India	7-15 years of post-MD/post-MS/post-MPH/post-PhD or equivalent clinical research experience	To be Announced	5 years

Personal Support (tenable abroad)				
Agency	Scheme	Eligibility	Deadline	Duration
Alexander Humboldt Foundation	Fellowship for experienced researchers (Germany)	Independent PI (Assistant Professor/ Junior Research GL) with < 12 years experience	Rolling programme	6-18 months, can be divided into 3 blocks of minimum 3 months each in 3 years.
Alexander Humboldt Foundation	International Climate protection Fellowships (Germany)	Min Master's level education, first degree less than 12 years ago, practical experience in climate protection/ nature conservation, with leadership potential	To be announced in Sept	1 year
DBT/ NIH	Khorana- Nirenberg Scholar Program (India/NIH)	Fresh PhD/postdoc (> 5 years experience)	To Be Announced	2-3 years postdoc (NIH, USA)+ 2-3 years in independent DBT sponsored lab (India)
IBM - IUSSTF	IBM - IUSSTF Visiting Fellowships in Nanotechnology (Thomas J. Watson Research Laboratory New York)	PhD, permanent appointment in a research institute	To be Announced	3 months
Indo-US Science and Technology Forum	ASM-IUSSTF Indo-US Professorship in Microbiology	Microbiologists with significant experience in research or teaching in the field	15-Dec-15	short term
Union for international cancer control (UICC)	Yamagiwa-Yoshida Memorial international study grants (any country overseas)	PhD/MD with min 2 years postdoc experience	15-Jan and 15-July	3 months
US-India Educational Foundation	Fulbright-Nehru Academic and Professional Excellence Fellowships	Indian faculty/researchers with at least 5 years teaching experience, preferably below 50 years of ag	1-Jul-15	4-9 months

Research Grants				
Agency	Scheme	Eligibility	Deadline	Duration
British Petroleum (BP)/Bird life International / Conservation International /Fauna and Flora international/ Wildlife conservation society	Conservation Leadership Programme (CLP)- Conservation Follow-up Awards	Minimum team of three with at least 50% involved in previous CLP project and additional new team members with no more than 5 years of paid experience in the conservation sector	To be Announced, expected Feb	Upto 2 years
British Petroleum (BP)/Bird life International / Conservation International /Fauna and Flora international/ Wildlife conservation society	Conservation Leadership Programme (CLP)- Conservation Leadership Awards	Minimum team of three with at least 50% involved in previous CLP project and additional new team members with no more than 5 years of paid experience in the conservation sector	To be Announced, expected Feb	upto 3 years
CSIR	CSIR research Grant	PhD, regular appointment in a research institute	Rolling Programme	3 years
DBT	Project grant	PhD, regular appointment in a research institute	Rolling Programme	3-5 years
DBT	RESEARCH PROPOSALS IN HUMAN DEVELOPMENTAL & DISEASE BIOLOGY	clinicians/scientists actively engaged in the field of Human Developmental and Disease Biology	Rolling Program	
DBT	Small Business Innovation Research Initiative (SBIRI)- 22 batch	Public-Private Partnership Programme of DBT supports research initiatives of Indian Biotech Industry solely or in collaboration with academic partners. Operated through BIRAC	To be Announced	
DST/CNRS	INNO INDIGO Partnership Programme (IPP)	To foster collaboration	22-June -15	3 years

		between EU countries and India to improve diagnostics and interventions in chronic non-communicable diseases.		
DST (SERB)	Extra Mural Research Funding (Individual Centric)	PhD, regular appointment in a research institute	Rolling Programme	3 years
DST(SERB)	Early career research award	PhD, must hold a regular academic/research position in a recognized academic institution/ or national laboratories or any other recognized R&D institutions and must apply not later than the first two years of their regular service	Thrice a year (January, May and September)	3 years
DST	Woman Scientist scheme (WOS-A)	for unemployed women scientists	Rolling programme	3 years
DST	Woman Scientist scheme (WOS-B)	for unemployed women scientists	To Be Announced	2 years
Gates	Grand Challenges Explorations	Pump-priming funding for initial ideas.	11-Nov-15	1-6 years* (with extension)
ICMR	AD-HOC RESEARCH SCHEMES	PhD, regular appointment in a research institute	Rolling Programme	2-3 years
James McDonnell Foundation (USA)	2015 Scholar Awards in Complex Systems Science	5-15 years post PhD with a regular position in a non-profit research institution. No nationality restrictions	To be Announced	3-6 years
Simons Foundation Autism Research Initiative (SFARI)	SFARI Explorer Awards	PhD, MD or equivalent with faculty position in research or educational institute. No citizenship or country requirements	Rolling Program	1 year

USAID/NSF	Partnership for enhanced engagement in Research (PEER)	PIs in developing countries collaborating with a PI in US having a NSF grant active for the duration of the award	15-Jan-16	1-3 years
WWF-India	Small Grants Program	for individuals based in India to carry out conservation research or undertake a conservation project	grants are provided twice a year. phase I applications to be submitted by 30 June and Phase II applications by 31-Dec	6-12 months

Infrastructure Grants

Agency	Scheme	Eligibility	Deadline	Duration
DBT	Creation of Center of excellence and Innovation in Biotechnology (CEIB)	PIs with strong track record, permanent position at a non-profit research institution	To be Announced	5 years
Wellcome Trust (UK)	Multi-user equipment grant	Open to researchers with previous track record of Trust funding and who can demonstrate a strong track record of independent research accomplishment.	To be Announced Nov-15	up to 5 years

International Collaborations

Agency	Scheme	Eligibility	Deadline	Duration
DST-CEFIPRA	Industry Academia Research & Development Programme	To support collaboration between academia and industry from India and France in the field of affordable Medical Devices	31-Aug-15	3 years

DBT/CDTI, Spain	Indo-Finland Joint Call for Proposals in Health and Well Being	Projects from industry or research organisations. Industry-academia collaboration recommended. Needs Collaborator in Finland	17-Sep-2015	4 years
DST/ Max Planck Society	Max Planck Partner Groups at Indian Partner Institutions	To promote cooperative research between the former research lab at MPI and institutions in India to allow continuation of the research	15-Sep-15	3-5 years
DST/JSPS (Japan)	Indo-Japan Cooperative Science program (IJCSP)	To promote bilateral scientific collaboration between Indian and Japanese scientists through joint projects or workshops	8-Sep-15	2 years
Human Frontier in Science Program (HFSP)	Young Investigator's grants	Junior Independent PI, within 5 years of obtaining an independent position	To be announced in Dec 2015	3 years
Human Frontier in Science Program (HFSP)	Programme grants	Independent PI	To be announced in Dec 2015	3 years
Human Frontiers in Science Program (HFSP)	Career Development Award	Need to have held one of 2 Feeder Fellowships	27-Aug-15	3 years
Indo-US Science and Technology Forum	Indo-US R &D Joint Networked Center	Needs 2 Indian and 2 American scientists from academia and laboratories (both public and non government)	31-Aug-15	2 Years
Indo French Centre for the Promotion of Advanced Research IFCPAR	Indo-French Collaborative research projects	PhD, permanent appointment in a research institute	1-Apr and 1-Oct each year	3 years
National Geographic	Conservation trust	No restriction on educational qualification. applicants must provide a record of prior research or conservation action as it pertains to the proposed project.	at least 8 months prior to anticipated field dates	1 year

International Exchange				
Agency	Scheme	Eligibility	Deadline	Duration
BBSRC (UK)	India Partnering Award	Promotes scientific exchange especially of early career scientists between India and UK	12-Nov-15	4 years
Cambridge - India	Hameid visiting fellowship	Academics at Indian universities with an existing academic relationship with colleagues at the University of Cambridge or vice versa	No Deadline	1-2 weeks
CEFIPRA-DST	Raman-Charpak Fellowship Program	Students registered for PhD in an Indian/French institution	31-May-15	3-6 months
DST/ DAAD (Germany)	DST-DAAD Project based personnel exchange programme	collaborative travel for upto 4 visits on either side	15-June-15	2 years
DAAD, Germany	Research Stays	University academics and scientists from India on active duty	1-Oct-15	1-3 months
DBT/ MCTI (Brazil)	Indo-Brazil-Joint call for proposals in the field of Biotechnology	Needs Brazilian collaborator, regular position in research institute	30-Sep-15	3 years
Matsumae International Foundation (Japan)	MIF Research Fellowship	PhD, permanent appointment in a research institute. Needs to work in Japanese institute.	31-Aug-15	3-6 months
Royal Society, UK	International Exchange scheme	Postdoc or holding independent position in research institute/university	1-June-15	variable from 3 months, 1 year or 2 years

Organising Meetings/Symposia/Workshops				
Agency	Scheme	Eligibility	Deadline	Duration
DBT	Neuroinformatics and Computational Neuroscience Education (INCNE)		Rolling programme, applications reviewed	

			twice a year	
DST	Financial Assistance for organising Conference/Seminar/Symposium/Workshops		3-6 months prior to the event	
CSIR	Financial Assistance for organising Conference/Seminar/Symposium/Workshops		3 months before the event	
Company of Biologists	Scientific Meetings Grant		21 Jan, 25 Mar, 25 June, 9 Sep	
Company of Biologists	Small Meetings grant		15 Jan, 5 Apr, 25 Jun, 10 Sep	
Indo-French Centre for the Promotion of Advance Research (IFCPAR)	Grant for organizing Seminars and Workshops	Needs French collaborator	1-Apr and 1-Oct every year	
DBT/ISTPCanada	Canada - India S& T Cooperation, Proposal for Partnership Development activities (PDAs)	Needs Canadian Collaborator	To be Announced	
DST/Royal Society and Department for Business, Innovation & Skills (BIS) UK	India-UK Scientific Seminars	PhD with regular appointment at a research institute in India or UK	1-June-15	
EMBO	EMBO Courses and Workshops program	Funds conferences, workshops, practical courses and symposia that promote collaborations and exchange in the latest life science advances. Funding priority is given to events held in an EMBC Member State or cooperating country	1-Aug-15	

Indo-US Science and Technology Forum	Indo-US Bilateral Workshops/Symposia/Conferences	Qualified scientist from all science disciplines working at Indian and American institutions	31-Aug-15	
Lady Tata Memorial Trust	Meetings/Symposia/Workshops in the area of medical research		2 months prior to the event	
TWAS	International Scientific meetings	Organiser must be developing country	1-Dec for July-Dec meetings and 1 June for Jan-June meetings following year	

Travel				
Agency	Scheme	Eligibility	Deadline	Duration
DBT	Travel Support for attending International Conference/Seminar/Symposium	PhD, Age less than 50 years	At least 8 weeks prior to travel date	
DBT	CREST Award	Applicant must have a permanent job	To be Announced	1-12 months
DST	International Travel support Scheme	open to all researchers. Senior researchers (> 35 years) cannot apply to Int Council of Scientific Unions (ICSU) sponsored events	Rolling programme. App. to reach two months prior to the event	
International Brain Research Organisation (IBRO)	International Travel Grants	For participation in international Neuroscience meetings	1-Mar for meetings in Jul-Dec and 1-Sep for meeting in Jan-Jun following year	
ICMR	International Travel by Non-ICMR Scientists	Biomedical scientists engaged in R&D. Senior Scientist (above 35 yrs of age) are eligible to apply only to international scientific events which are not sponsored by international	6 weeks before the commencement of the event	

		Council of Scientific Unions (ICSU).		
INSA-CSIR-DAE/BRNS-DOS/ISRO	CICS Travel Fellowship Programme	PhD, Indian nationality	committee meets six times/year with specific deadline for each meeting	
Ratan Tata Trust and Navajbai Ratan Tata Trust	Education grant- Travel grants	PhD with regular position in research institute, Indian nationality	at least 3-4 months prior to departure. 31-May every year	

Entrepreneurship/Technology Development grants

Agency	Scheme	Eligibility	Deadline	Duration
Wellcome Trust (UK)	Affordable Healthcare in India	The PI should be based in India with regular employment in Not-for-profit institutions, governmental or non-governmental organisations and international organisations operating within India.	To be announced	
Wellcome Trust (UK)	Biomedical resource and technology development grants	applicants in the UK who have a track record in obtaining grant funding. Researchers in low- or middle-income countries eligible to apply if they have a track record of Trust funding or can demonstrate a strong track record of independent research accomplishment.	To be announced	upto 5 years

Others

Agency	Scheme	Eligibility	Deadline	Duration
British Ecological Society (BES)	Outreach grant	Individuals or organisations interested in organising public engagement events in ecology. This includes, but is not limited to, members of the BES, researchers, schools, museums, libraries and community groups	11-Sep-15	

BIRAC	Contract research and service scheme to facilitate Academia-Industry Collaboration	One academic (primary applicant) + private company partner	To be Announced in Feb	
DBT	BioCare. Career Re-orientation Fellowship (CRF)	PhD (age limit 55 years). Women currently unemployed, temporarily employed or looking for change in career path	To Be Announced	12 months
DBT	Seminar Series in Neuroinformatics	international researchers in the field of Neuroinformatics and Computational Neuroscience Education visiting any of the node institutions, to encourage them to travel to at least one other city and institution	To be Announced	
DST	Utilisation Of The Scientific Expertise Of Retired Scientists(USERS)	Age upto 67 years		2 years
Wellcome Trust	International Engagement Awards	Wellcome Trust-funded researchers in low- and middle-income countries for engagement with public and policy makers, strengthen capacity for public engagement in biomedical sciences and health research, stimulate dialogue and promote collaboration on engagement projects between researchers and public organisations	EOI submission on or before 21st Aug 2015. Full application (if invited) deadline 11 Sep 2015	upto 3 years
Rolex Awards	Young Laureates 2015	Will support projects in the field of science and health, applied technology, exploration and discovery, the environment, and cultural heritage	31-May-15	12-18 months

PARTIAL LIST OF AGENCIES GRANTING RESEARCH GRANTS TO PROJECTS IN HUMANITIES AND SCIENCES INCLUDING ENGLISH

Newton Bhabha Fund

<https://www.britishcouncil.in/newton>

The Newton Bhabha Fund aims to bring together the UK and Indian scientific research and innovation sectors to find joint solutions to the challenges facing India in economic development and social welfare. The scheme is part of the UK's £375 million Newton Fund to support science and innovation partnerships between the UK and emerging powers.

In India, the Fund is worth £50 million over five years and is supported by the UK and Indian governments through a ministerial agreement. Activities under the fund will be managed by a core group of Delivery Partners: the Academies; British Council/HE International Unit; Research Councils; TSB; and the Met Office

The Newton Bhabha Fund will use the UK's strengths in research and innovation to support greater scientific research capacity in India and build research partnerships between British and India research institutions.

How will we achieve that?

The Fund will cover three broad categories of activity:

- **People:** building skills and capacity through training and people exchanges;
- **Programmes:** research collaboration on development topics;
- **Translation:** taking innovation from universities to industry.

We have identified together with the Indian government three main priority areas to focus on:

- Sustainable Cities and Rapid Urbanisation
- Public Health and Well being
- Energy Water Food Nexus

The following two underpinning capabilities were also identified:

- High Value Manufacturing
- Big Data

By working together on research and innovation programmes, the UK and India will build a strong, sustainable and systemic relationship. This will support the continued excellence of a scientific research base and innovation ecosystem and act as a golden key to unlock opportunities for wider collaboration and trade between both countries.

Planned activities

British Council India has planned a number of activities under the Newton Bhabha Fund to enhance scientific research in India. These include:

- PhD scholarships for young Indian students to do their PhD at UK universities.
- PhD placements for young Indian and UK students to spend 3-6 months of their research at any UK university or Indian university.
- Workshops and seminars that will share UK's expertise and improve India's ability in a number of areas, including research skills, research management and administration, English for scientific research and knowledge transfer from academia to industry.
- Bilateral Summer and Winter schools for hands-on training of advanced research techniques for PhD students and early career researchers.

- *STEM education and curriculum development.*

All calls will be published on this site and more information on specific programmes will be available shortly.

Get more information

Read more about the Newton Fund or contact our management team:

Purti Kohli, Senior Programme Manager – Newton Programme Purti.Kohli@britishcouncil.org

ELTReP awards announced for 2015-16

Selected by a panel of external ELT specialists and British Council staff with professional ELT experience, 8 applicants were selected for the 2015-16 awards.

<https://www.britishcouncil.in/programmes/english-partnerships/research-policy-dialogues/english-language-teaching-research>

About ELTReP awards

*As part of our work in English, we seek to establish links between policy, research and communities of practice between India and the UK. To stimulate innovative research and encourage classroom-based action research in English language learning and teaching, we launched the **ELTReP Awards** in India in 2013, in line with a similar award scheme in the UK.*

The ELTReP Awards are essentially for small or medium scale research projects and can be viewed as seed-funding for bigger projects. However, ELTReP Awards are not meant to support or contribute towards formal M Phil or PhD work.

The purpose of ELTReP Awards are to:

- *Facilitate and strengthen the production of high quality research from India relevant to the Indian ELT community.*
- *Document innovative classroom practice in India using rigorous action-research methodology.*
- *Improve access of ELT policy makers and professionals worldwide to high quality and relevant research from India and the UK.*
- *Facilitate and encourage the establishment and maintenance of active research links between ELT professionals and policy makers in India and the UK.*
- *Support British Council India's overall objectives in English in Education Systems.*

Eligibility

Any person resident in India and professionally involved in English language teaching with an affiliation to an educational institution in India.

This scheme is not intended to fund PhD studies or similar research leading to an academic degree.

Value of the Award

Awards may be made for amounts starting from GBP 200 up to a maximum of GBP 5000, payable in INR.

Our intention is to encourage a wide range of new research and the total funds available are limited. We expect this will favour proposals at the lower levels of funding.

- We do not expect the partnership awards to cover the full costs of the research, but to fund essential elements of the research without which the research would not take place.
- Proposals should make clear how the other costs of the research will be funded.
- Proposers of jointly funded research must agree to the full conditions of the award (see below).
- The proposal must make clear what expenditure items the award will fund. The scheme will not fund items of equipment which institutions would normally be expected to possess (for example computing equipment including laptops).
- Our standard timing for the payment of awards will be 50% on acceptance of the award, and 50% following the receipt of a satisfactory final report. However, individual needs will be taken into account.

Benefits of the Award

- Financial support which enables the research to take place.
- Dissemination of the research by the British Council as an example of quality research from the UK with full acknowledgement of the researchers and their affiliated institutions.
- The right to refer to the research as funded by the British Council ELT Research Award scheme.
- Support with access to appropriate partners, teachers and learners overseas as agreed on a case by case basis.

Shastri Indo-Canadian Institute

Shastri Research Grant 2015-16 (SRG) - CLOSED

The Shastri Indo Canadian Institute is pleased to announce a Call for Applications for Shastri Research Grant (SRG) 2015-16 for its Canadian and Indian Member Institutions in good standing.

Objective of SRG is to support collaborative research projects between Indian and Canadian institutions entailing scholars' mobility and capacity building of scholars/researchers between India-Canada.

SRG is a bi-national research initiative to support research collaborations. The research theme will build on issues concerning all domains of studies: social Sciences subjects (i.e., anthropology, communications studies, economics, education, human geography, history, law, linguistics, political science, public administration, management, psychology, sociology, humanities, cultural studies), STEM subjects (Science, Technology, Engineering, Mathematics) including food security and sustainable development; water resource management; gender and health, bi-lateral trade and investment; energy and environment; securing future of children and youth and higher education-mobility.

Please note the following points:

- One institution can receive only one SRG award; and the receipt of the award is subject to the institution being a SICI member in good standing with fully paid-up membership for the current year (2015-16).

- In addition to applications' merits, preference will be given to those member institutions who have not received any SICI grants in the past 2 years (2013-14 and 2014-15).
- The selected awardees will have 3 weeks to confirm their acceptance of the SICI grant (subject to their institution's eligibility).
- Any declined project grants will be awarded to the wait listed applicants.
- Subject to the availability of funds, more SRG grants may be given to wait listed awardees.
- In addition, the wait listed awardees may take the advantage of SPSG in Aid grant 2015-16, if available (see SPSG in Aid program announcement).

Value:

Up to CAD\$ 6,000/per project. (Contributions from the applicants' institutions are encouraged).

Duration:

Date limits for utilization of the grant:

The grant must be fully utilized between **15 November 2015 – 31 August 2016**.

Eligibility:

- Proposed SRG projects must involve a bi-national research initiative in any of the fields mentioned above.
- Faculty members/academics/researchers of Canadian and Indian member institutions are eligible to apply for this grant. A list of SICI member institution is available here: <http://www.sici.org/about/members/>. However, the lead applicant must be from one of the Canadian member institution of SICI.
- The work described in the SRG project proposals should include participation by students/young researchers (at least 1 from India and 1 from Canada) in the SRG research team.

Application Requirements:

- A completed application form.
- The application should contain a short project description (1,500-2,000 words, excluding bibliography) covering the following information: nature of the proposed research and rationale; project's research objectives; research methodology; general description of the activities, expected results, dissemination strategies, etc.
- Curriculum vitae of both lead and co-applicants (not more than 5 pages).
- A budget breakdown (summary form) showing the description of eligible expenses to execute the project.
- Identification of the authorized persons in each institution (if available other than the lead and co applicants).
- Please submit your completed electronic application to siciapp@ucalgary.ca. Applications sent to a different email address will not be considered.
- Please mention: '*Application for SRG 2015-16*' on the subject line of your email.

Evaluation Criteria:

Please note that the panel of adjudicators is composed of volunteer professors of member organizations in India or Canada. Thus this panel would not necessarily have the expertise in every field of work in all the disciplines, and the external reviewers are generally not solicited by the panel. Therefore, the applicants are advised to make an effort to write all the sections of the application in a clear language that would be generally be understood by your colleagues from any discipline in your own University or institute. Please avoid excessive use of technical field-specific jargon and acronyms; and if required, do explain these terms clearly at their first appearance. SRG Adjudicating committee will make the final decision concerning successful applicants based upon the following marking system:

1. Project's objectives, scopes and methodology (10 points)

- Are the project objectives and scopes clear and easy to conceptualize in operational terms?

- *Is the project methodology appropriate and convincing for achieving the project's objectives?*
- 2. *The coherence and importance of proposed activities to achieve anticipated outcomes (10 points)*
 - *Are the activities proposed in the project description rationale in order to bring the anticipated outcomes on the project?*
- 3. *Scholarship of Researchers (10 points)*
 - *Do the applicants (lead and partner) have necessary academic and research background plus history of collaboration in the area of proposed research study to safeguard the success of the project?*
- 4. *Engagement of students and or young researchers in the project (10 points)*
 - *Does the proposed project plan to engage students/young researcher in the project activities for capacity building?*
- 5. *Budget (10 points)*
 - *Are the resources allocated in the budget realistic given the project's planned activities?*
 - *Are the project's budget lines conforming to SICI standard project expenses?*
- 6. *Timeline (5 points)*
 - *Is the project execution timeline well-structured and does it allot a realistic amount of time to achieve the project's objectives and goals?*

Acceptable Expenses:

- *If the global budget of the proposed project is greater than the maximum permissible grant amount, details of additional sources of funding should be provided to determine the feasibility of the project.*
- *Eligible expenses: international and local travel (economy class), accommodation and related costs, stipends for student research assistants, rental of equipment, communication, copying, printing costs, organizational support costs, and translation. Travel expenses may either be for Canadians going to India or for Indians coming to Canada.*
- *At the end of each project, the participants will be expected to report on how funds were spent and provide proof of expenditure.*
- *Projects that entail holding only the seminars, workshops or conferences without research component will not be accepted.*

Disbursement of Funds:

Subject to availability of funding, 75% of the project grant will be disbursed upon signing of letter of agreement between SICI and recipient's institution and remaining 25% to be released upon submission and approval of a final report to SICI by the recipient.

Application Deadline:

31 October 2015 (CLOSED)

Please note,

- *Late and incomplete applications will not be considered.*
- *SICI takes no responsibility for missing applications or materials sent by mail, post, electronic or via courier.*
- *If you do not receive an acknowledgement re your application within 2 business days, please contact Mahmuda Aldeen at the Calgary office via email.*
- *Names of the successful applicants will be uploaded on SICI website (<http://www.sici.org/home/>) by 21 November 2015.*

Application Form:

[SRG_Application_Form_2015-16.doc](#)

Report Form:

- [SRG-Final_Report-2015-16.doc](#)

- [Shastri_Grant_Reporting_Form.xls](#)

Contact:

For more information, please contact Mahmuda at the Calgary office:

Mahmuda					Aldeen
Program	and	Member		Relations	Officer
Shastri		Indo		Canadian	Institute
1418		Education		Tower	
2500		University		Dr	NW
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Fax:		(403)			289-0100
Email:	maldeen@ucalgary.ca				

Cambridge and India: External Funding Opportunities

<http://www.cambridge-india.org/funding-opportunities/external-funding-opportunities>

Specific support for international collaboration and partnership is available from the dedicated international funding section of research council and funding body sites. The following list provides links to various sources including research councils, charities and professional bodies that provide specific support for international collaborations and travel, with India-focused opportunities where available. For further relevant opportunities see the sites of the [RCUK Office in India](#) and the [UK-India Education and Research Initiative](#). For information on past areas of collaboration supported by RCUK India see their [timeline](#).

RESEARCH COUNCILS	GENERAL INTERNATIONAL ACTIVITIES	INDIA SPECIFIC OPPORTUNITIES
Arts & Humanities Research Council (AHRC)	<ul style="list-style-type: none"> ▪ International Research ▪ Research Networking Scheme 	
Biotechnology & Biological Sciences Research Council (BBSRC)	<ul style="list-style-type: none"> ▪ International Research ▪ International Workshops ▪ International Scientific Interchange Scheme (ISIS) ▪ Co-operation in Science and Technology 	<ul style="list-style-type: none"> ▪ India Partnering Awards
British Academy	<ul style="list-style-type: none"> ▪ International Relations ▪ Funding for International Activities 	

<u>British Council</u>	<ul style="list-style-type: none"> ▪ <u>Research & Collaboration</u> 	<ul style="list-style-type: none"> ▪ <u>British Council India</u>
<u>Economic & Social Research Council (ESRC)</u>	<ul style="list-style-type: none"> ▪ <u>International Research</u> 	
<u>Engineering & Physical Sciences Research Council (EPSRC)</u>	<ul style="list-style-type: none"> ▪ <u>International grants</u> 	<ul style="list-style-type: none"> ▪ <u>India Partnership</u>
<u>Medical Research Council (MRC)</u>	<ul style="list-style-type: none"> ▪ <u>International Opportunities</u> ▪ <u>Guidance on MRC international opportunities</u> 	
<u>Natural Environment Research Council (NERC)</u>	<ul style="list-style-type: none"> ▪ <u>NERC's International Role</u> ▪ <u>International Opportunities Fund</u> 	
<u>European Research Council (ERC)</u>	<ul style="list-style-type: none"> ▪ <u>Horizon 2020: International Cooperation</u> 	
<u>Royal Academy of Engineering (RAE)</u>	<ul style="list-style-type: none"> ▪ <u>International</u> ▪ <u>International Research Support Schemes</u> 	<ul style="list-style-type: none"> ▪ <u>Research Exchanges with China and India</u>
<u>Royal Society</u>	<ul style="list-style-type: none"> ▪ <u>International Activity</u> ▪ <u>Newton International Fellowship</u> ▪ <u>International Exchanges Scheme</u> 	<ul style="list-style-type: none"> ▪ <u>India-UK Scientific Seminars</u>
<u>Wellcome Trust</u>	<ul style="list-style-type: none"> ▪ <u>International Funding</u> 	<ul style="list-style-type: none"> ▪ <u>Affordable Healthcare in India</u> ▪ <u>Wellcome Trust/DBT India Alliance</u>
<u>Bupa Foundation</u>	<ul style="list-style-type: none"> ▪ <u>Multi-country grants</u> 	

Research Funding Agencies and Proposal Writing

Indian Research Funding Agencies:

University Grant Commission (UGC)

Bahadur Shah Zafar Marg, New Delhi – 110 002

Fax: 335197, 3232783, 3236288, 3261797, 3315000

Tel: 011- 23239337, 2322317, 23232701, 23231692, 23235743, 23234116

Indian Council for Social Science Research (ICSSR)

35 - Ferozeshah Road,
NEW DELHI - 110001.

Funding schemes of Ministry of Environment and Forests, Govt. of India

Indian Council of Agricultural Research

Format of summary sheet for new project proposals involving foreign collaboration/activities

General Foreign or International Funding Agencies:

- [American Academy in Rome](#)
- [Association of Commonwealth Universities \(ACU\)](#)
- [Australian Bicentennial Scholarships](#)
- [Bradley Foundation Grant program](#)
- [British Council](#)
- [The British Institute in Eastern Africa](#)
- [Canon Foundation Fellowships](#)
- [Commonwealth Foundation](#)
- [CO-REACH Social Science Collaborative Research between Europe and China](#)
- [Daiwa Anglo-Japanese Foundation](#)
- [Earthwatch Institute](#)
- [Ford Foundation](#)
- [The Foundation for the Future](#)
- [Fulbright Commission](#)
- [Harry Frank Guggenheim Foundation](#)
- [Harry Ransom Humanities Research Center Research fellowships](#)
- [Horowitz Foundation for Social Policy](#)
- [International Federation of University Women](#)
- [Toyota Foundation](#)
- [UKIERI](#)
- [Wenner-Gren Foundation for Anthropological Research](#)
- [Social Science Research Council\(SSRC\)](#)
- [The Social Sciences and Humanities Research Council \(SSHRC\)](#)

Federal agency promotes University based research and training in Social Science and Humanities

Association of Commonwealth Universities (ACU):

British Academy/ACU Grants for International Collaboration

Funds are available to support international joint activities, involving British scholars in collaboration with Commonwealth partners. Applications must be for projects involving genuine collaborative work between a defined group of scholars in one, or possibly two, other Commonwealth countries. Priority will be given to applications involving the initiation of a new programme where there is an expectation of continued

collaboration, or a defined outcome such as planned joint publications. Grants are tenable for a maximum of 1 year and are for up to £5000

ACU Titular Fellowships

To enable the universities of the Commonwealth to develop the human resources of their institutions and countries through the interchange of people, knowledge, skills and technologies. Fellowships are for up to £5000 and tenable for a maximum of 6 months

CSFP (Commonwealth Fellowships and Scholarships Plan) awards

CSFP (Commonwealth Fellowships and Scholarships Plan) awards are open to Commonwealth citizens, permanently resident in a Commonwealth country other than the UK, holding or returning to a teaching appointment in a university in the developing Commonwealth. **Subjects are unrestricted**, however preference is given to applicants which clearly fit with the development plans of the candidate's home institute. Nominations for Scholarships and Fellowships can only be accepted from universities/agencies which have been invited to make such nominations by the Commissioners.

Commonwealth Academic Fellowships

Deadline: December 31 each year

Academic Staff Scholarships

Deadline: December 31 each year

Fulbright Commission:

Fulbright distinguished scholar awards

Deadline: usually February / March each year

The Fulbright Commission seeks applications from professionals or academics in any field to participate in the distinguished scholar programme. The scheme enables scholars to undertake lecturing, research or professional development in the US for a minimum of 10 months. Applicants must be EU citizens normally resident in the UK. Awards are worth £15,000 each.

Ford Foundation

Deadline: None

The Foundation's current interests are:

- asset building and community development: economic development and community and resource development;
- peace and social justice: human rights, governance and civil society: education, sexuality, religion, media, arts and culture
- knowledge, creativity and freedom.

Australian Bicentennial Scholarships

Deadline: June each year (applications forms available from April)

The object of the scheme is to promote scholarship, intellectual links, and mutual awareness and understanding between the UK and Australia, in particular:

- to enable UK graduates to study courses or undertake research in Australia;
- to enable Australian graduates to take courses or undertake research in the UK;
- to make allowance within the scheme for disadvantaged persons.

An applicant for a scholarship must be registered as a postgraduate student at a British tertiary institution, or be eligible for such registration at an Australian tertiary institution, and resident in the UK. An applicant for a fellowship should have a good postgraduate degree or equivalent experience.

Younger scholars are preferred. Each scholarship or fellowship will offer a grant of up to £4,000. Applicants must spend at least three months studying in Australia.

Canon Foundation Fellowships

Deadline: September 15 each year

Grants are offered, regardless of discipline, to European nationals and permanent residents who intend to go to Japan and to Japanese who intend to go to Europe.

Applicants may be based at institutions of learning or be members of commercial, industrial, governmental, or professional organisations.

Applicants should preferably hold a Ph.D. and must not be older than 40 years of age. Financial support for Research Fellows in the past has ranged from 22,500 € to 27,500 € per year, pro-rated for shorter periods.

The fellowships are generally given for a term of one year, but shorter research stays, from three to six months, are also possible. Fellowships may be taken up, at the earliest, January 1 of the year following the competition. The foundation grants up to 15 fellowships annually, two-thirds to Europeans and one-third to Japanese applicants.

British Council

British Council Joint Research Programmes

British Council partnership programmes have been developed to promote links and contacts between British and other European higher education, research institutions, and laboratories. These programmes are designed to facilitate collaboration in areas of mutual interest by the enhancement and transfer of research and teaching expertise, whilst providing opportunities for young researchers. They operate in most European countries with partner organisations and are administered locally. The range of these programmes and subject areas varies from country to country. Financial support is provided to contribute to fares and subsistence for exploratory and bilateral visits of specialists, for approved projects of up to three years duration

Deadlines and Subject areas covered vary for each country. Application and selection procedures are agreed with the British Council's partner organisations, and, thus, are different in each country.

- **France**
- **Germany**
- **Italy**
- **Netherlands**
- **Poland**
- **Portugal**

British Council's Researcher Exchange Programme (RXP)

Deadline: Annually

The British Council is announcing a first call for proposals under a new initiative to assist researchers make international connections.

The British Council's Researcher Exchange Programme (RXP) is a £500,000 initiative aimed at supporting new links between early stage researchers in the UK and in other countries. RXP provides individual researchers with awards covering travel and subsistence costs, and some consumables costs, needed to develop new scientific collaborations and contacts through exchange visits of between one week and three months' duration.

The purpose of RXP is to help develop new research links between higher education institutions and research laboratories in the UK and other countries. It aims to encourage mobility and internationalism among early stage researchers for the exchange of information, ideas and knowledge, and for relationship-building.

The exchange awards are designed to support new links between early stage researchers in the UK and in other countries. The research link can be in any area of science, engineering and technology, including social sciences and humanities. The term "early stage" refers to researchers at the beginning of their research careers, with less than ten years active research experience since the completion of a doctoral degree, or those in the last year of their PhD. The duration of the exchange visit will be between one week and three months, and may be in the nature of a single or multiple visits. The maximum award that can be applied for is £5,000.

Please note that more than one researcher from the same sending or receiving research group can apply for an award, but each must submit a separate application.

Please see the RXP web site: www.britishcouncil.org/science-rxp for full details and an online application form.

For more information on RXP and the exchange awards please write to: science@britishcouncil.org

Darwin Now Awards

The British Council Darwin Now awards offer small grants to allow individuals working in the sciences, humanities, arts and media, the opportunity to pursue a stand-alone piece of fieldwork/research outside the UK.

In recognition of the strong contribution made by individuals working in new environments and sharing their ideas with new audiences the British Council, are offering UK based researchers, artists and writers the opportunity to spend time doing fieldwork in another country.

INSPIRE: International Strategic Partnerships in Research and Education

INSPIRE – International Strategic Partnerships in Research and Education is a British Council funded project that aims to significantly strengthen the academic and research partnerships between the UK and a strategic selection of countries in Central South Asia, including: Pakistan, Bangladesh, Kazakhstan and Afghanistan.

American Academy in Rome

Rome Prize

Annual Deadline 1 November

Each year, up to 12 Rome Prizes are awarded in the Humanities. The Academy welcomes applicants in the field of musicology, as well as archaeology, history, the history of art and architecture and literary studies. Rome Prize winners reside at the Academy's 11-acre center in Rome and receive room and board and a study. Both pre-doctoral and post-doctoral awards are available and carry stipends of \$15,750 and \$21,000, respectively. Residencies are 11-months.

Applicants for pre-doctoral fellowships must have fulfilled all pre-dissertation requirements by the application deadline. Applicants for post-doctoral fellowships must have received the Ph.D. by the time of application.

The disciplines listed above are intended to be suggestive, not exclusive. Any humanistic approach, or combination of approaches, to these areas will be given consideration. Furthermore, comparative projects and projects that cut across conventional and arbitrary chronological limits are welcome. The annual deadline for the Rome Prize is November 1st.

For further information or to download guidelines and an application, please visit the website at <http://www.aarome.org> or contact the American Academy in Rome, 7 East 60th Street, New York, NY 10022, USA, Attn: Programs. T: +1-(212) 751-7200; F: +1-(212) 751-7220; E: info@aarome.org. Please state specific field of interest when requesting information.

The American Academy in Rome is one of the leading overseas centers for independent study and advanced research in the arts and humanities. Through a nationally juried process, up to 30 Rome Prize fellowships are awarded, annually, in Architecture, Design, Historic Preservation & Conservation, Landscape Architecture, Literature, Musical Composition, Visual Arts, Ancient Studies, Medieval Studies, Renaissance and Early Modern Studies and Modern Italian Studies

Bradley Foundation Grant program

Deadline: every December 1, March 1, July 1, September 1

At present, the Foundation aims to encourage projects that focus on cultivating a renewed, healthier, and more vigorous sense of citizenship among the American people and among peoples of other nations, as well.

Projects may address any arena of public life where citizenship is an important issue, eg economics, politics, culture or civil society.

Earthwatch Institute

Field research

Deadline: None

Earthwatch Institute is an international non-profit organization that supports scholarly field research worldwide in the biological, physical, social, and cultural sciences. The Research Program at Earthwatch supports a diversity of research projects of high scientific merit worldwide, which address critical environmental and social issues at local, national, and international levels.

It supports doctoral and postdoctoral researchers, or researchers with equivalent qualifications

The average project grant is between \$16,000 (£9,600) and \$48,000 for one full season. Grants cover the cost of maintaining volunteers and principal research staff in the field.

Earthwatch is one of few significant sources of long-term funding for field-based research; 25 percent of the research projects have been supported for more than 5 years, and 10 percent have been supported for more than 10 years. Approximately one-third of all scientists Earthwatch supports are scientists early in their careers, women in science, and/or scientists from developing nations

The Foundation for the Future

Research Grants

Deadline: 30 April each year (invited formal proposals August 1)

The Foundation For the Future conducts and funds a Research Grants Program to provide financial support to scholars undertaking research at a macro level that is directly related to better understanding the factors affecting the long-term future of humanity.

Current areas of interest are:

- How will changes in birth rates, mortality rates, and reproductive technology affect the Human Genome over the long-term future?
- What effect will the current global immigration and emigration of populations have on the demography of the planet over the long-term future?
- What are likely to be the major driving forces/initiatives/issues for humanity through the new millennium?
- Are mechanisms of Biological and Cultural evolution in sync with our systems of Governance and Economy? How are they likely to evolve and develop over the long-term future?

Funds of between \$5,000 and \$25,000 are available. Proposals are accepted from unaffiliated individuals or on behalf of individuals or research teams from universities and colleges or non-profit, non-academic organizations.

Daiwa Anglo-Japanese Foundation:

Increased funding has been made available for both the Daiwa Foundation Small Grants and Daiwa Foundation Awards for 2006/07. In addition, funding bands and eligibility requirements have been adjusted to allow greater flexibility.

Daiwa Foundation Small Grants

Deadlines: 31 March and 30 September annually

Daiwa Foundation Small Grants are available from £1,000-£5,000 to individuals, societies, associations or other bodies in the UK or Japan to promote and support interaction between the two countries. They now cover all fields of activity, including educational and grassroots exchanges, research travel, the organisation of conferences, exhibitions, and other projects and events that fulfil this broad objective. New initiatives are especially encouraged.

Daiwa Foundation Awards

Deadline: 31 May annually

Daiwa Foundation Awards are available from £5,000-£15,000 for collaborative projects that enable British and Japanese partners to work together, preferably within the context of an institutional relationship. Projects in all academic, professional, cultural and educational fields are eligible.

International Federation of University Women

International fellowships

Deadline: usually between 1 Sept and Mid Oct

The International Federation of University Women offers a limited number of fellowships and grants to women graduates for advanced research, study and training. The competitions are normally held every two years.

IFUW fellowships and grants are open only to women graduates who are members of the International Federation. The awards are intended to help finance short graduate and post-graduate study, research and training projects and to serve as complementary funds for longer programmes.

Awards offered include:

- the British Federation Crosby Hall fellowship of £2,500 for women wishing to study or undertake research in Britain;
- the Canadian Federation of University Women/A Vibert Douglas international fellowship of CAN\$8,000 for use in Canada or abroad;
- the Ida Smedley Maclean international fellowship of CHF8,000 to CHF10,000;
- the study and action programme fellowship of CHF8,000 to CHF10,000;
- the New Zealand Federation of Graduate Women/Daphne Purves grants of CHF3,000 to CHF6,000.

Fellowships are to encourage advanced scholarship and original research by university women. Applicants must be well started on the research programme to which the application refers. Fellowships are intended to cover at least eight months of work. They are not normally given for a masters or for the first year of a PhD programme.

Harry Ransom Humanities Research Center Research fellowships

Deadline: 01 Feb each year

The Harry Ransom Humanities Research Center is one of the world's foremost institutions for research in literature, arts, and the humanities

Approximately 40 fellowships are awarded annually. Priority will be given to those proposals that concentrate on the center's collections and that require substantial on-site use of them.

The fellowships available are as follows:

- American Society for Eighteenth-Century Studies: two fellowships, jointly sponsored with the Ransom Center, for literary, cultural or historical study. Applicants must be members of ASECS at the time of application;
- British Studies fellowship: for research in British literary, cultural, and historical subjects;
- the Cline fellowships: for research on nineteenth- or early twentieth-century British topics;
- the Fleur Cowles fellowships: two are available for research on topics related to twentieth-century art, journalism, women's studies, and general literature and culture;
- the Dorot Foundation fellowships in Jewish Studies: for research on Jewish authors and on relevant cultural topics requiring research in the center's collections. These fellowships may be extended to four months or, exceptionally, for longer periods;
- the Alfred A and Blanche W Knopf fellowship: for research in the areas of publishing and general literary studies, with special emphasis given to research concerning Knopf authors;
- Limited Editions Club: for research in the center's rare book and print collections, with emphasis given to work with illustrated books;
- the Andrew W Mellon Foundation: a number of fellowships are available in general literary and cultural studies. These fellowships may be extended to four months.
- the Marlene Nathan Meyerson photography fellowship: for research in the center's photography collections;
- Nikon/David Douglas Duncan fellowship: for research in the center's photography collections;
- the Cora Maud Oneal fellowship: for research in general literary studies;
- Pforzheimer fellowships in renaissance studies: for research in the Pforzheimer collection as well as in general Renaissance Studies;
- the Warren Skaaren film fellowship: for research in the center's film collections;
- the CP Snow fellowship: for research in general literary and cultural studies, with a special emphasis on the relationship of literature and science.;
- the Ransom Center/South Central Modern Language Association fellowship: a jointly-sponsored award offered to members of SCMLA for general literary and cultural studies. Applicants must be members of SCMLA at the time of application.

Applicants must be postdoctoral or equivalent or have a substantial record of scholarly achievement. There are no nationality restrictions.

The British Institute in Eastern Africa

Research Grants

Deadline: Usually 30 April and 31 October

The Institute awards at its absolute discretion grants to assist scholars undertaking original research in Eastern Africa broadly defined, in any field of the humanities and social sciences with some emphasis on archaeology, African history, anthropology and related subjects. Grants are normally awarded as contributions towards actual research costs and do not include institutional overheads or any stipendiary element for applicants.

The maximum sum awarded is £1000 sterling or its equivalent in local currency.

It is a further condition that all BIEA grant recipients should be paid-up members of the Institute, minimally for the year the grant is awarded.

UKIERI

Over the next five years, the UK-India Education and Research Initiative (UKIERI) aims to substantially improve research and education links between India and the UK, ensuring in the longer term that we become each other's partner of choice in education.

The UK Government has committed over £12 Million to the Initiative through the Department for Education and Skills (DfES), the Foreign and Commonwealth Office (FCO), the Office of Science and Innovation (OSI) and the British Council. BP, BAE Systems, GlaxoSmithKline, Shell are Corporate Champions of the Initiative, and have pledged around £ 2 million cash and a similar value in-kind support. We are in discussions with the Government of India as well as Indian private sector sponsors about further collaborative involvement.

Higher Education and Research

The largest part of the £12 million UK government funding and additional corporate sponsorship funds will be directed towards Research and Higher Education collaborations. The two principal activities will be promoting research partnerships between centres of excellence, and developing joint and dual course delivery.

UKIERI emphasises creating institution to institution links - establishing durable channels and vehicles for collaboration in the years ahead. Excellence will be the hallmark of the project and research collaborations funded. The initiative, through rigorous evaluation, will be supporting research and collaboration proposals that can demonstrate excellence. Project proposals will be evaluated according to research merit, potential for innovation and overall benefit, with subject areas will be drawn from science and technology, the social sciences and other areas of economic importance in the India-UK relationship.

The initiative will support staff and student exchanges, promoting new links between Higher Education (HE) institutions and research centres of excellence. All institutions, intending to cooperate, are invited to submit project proposals. Research cooperation projects might include staff secondments, exchanges of postdoctoral and other research workers and support for postgraduate research students in both UK and India.

Collaborative delivery projects will include taught Master's courses (Full Awards), and shorter postgraduate professional courses (Short Awards) which may carry an award or CATS credit rating. Collaborative delivery projects will normally receive support for a 3 year start-up period.

By 2011, the following minimum targets will have been met:

- 50 new collaborative research projects, including 5 'major' projects linking centres of excellence
- 40 new UK award programmes delivered collaboratively in India with 2,000 Indian students enrolled
- 300 additional Indian research students, postdoctoral researchers and staff will have worked in the UK
- 200 UK researchers worked in India and 200 UK undergraduate students supported for studies in India

- 2000 Indian research students completed research degrees in the UK through collaborative delivery

Higher Education and Research Awards

Collaborative Research Awards - Workshops in the UK and India

UKIERI supports research collaborations between the UK and India.

For details see: www.ukieri.org/research-awards.htm.

Collaborative Programme Delivery Awards

UKIERI supports collaborations between UK and Indian institutions to facilitate the development and delivery of UK degrees and professional qualifications in India through institutional partnerships.

For details see www.ukieri.org/collaborative-delivery-awards.htm.

Commonwealth Foundation

Civil society responsive grants

Deadline: 30 June, 30 September, 31 December and 31 March

These grants enable people from developing Commonwealth countries to participate in activities such as short training courses, workshops, seminars, conferences, cultural festivals, exchanges and study visits in other Commonwealth countries.

The foundation's funding programmes areas are governance and democracy, sustainable development and culture and diversity.

The limit for a responsive grant application is £20,000. The majority of the grants given by the foundation are under £10,000, with the average grant being given approximately £5,000. Applications for grants of over £10,000 must be submitted in time for the 30 June and 31 December deadlines in order to be considered by the grants committee in September and March. respectively.

Wenner-Gren Foundation for Anthropological Research

The Foundation has a wide variety of grant programs for anthropological research and scholarship that are open to applicants irrespective of nationality or country of residence.

These include:

- Conferences and Workshops
- PhD Grants
- Research Grants

Toyota Foundation

Research Grant Programme

Deadline: annually

The Toyota Foundation was established to work "for the sake of greater human happiness" in October 1974. Ever since, the Foundation has engaged in activities guided by the principles of "foresight, citizen participation, and internationality" in the hope of contributing toward an increase in human happiness and the development of society.

Research Grants are awarded on an annual basis and can be for one or two years

Harry Frank Guggenheim Foundation

Research grant

Deadline: August 1, annually

The Harry Frank Guggenheim Foundation welcomes research grant proposals from any of the natural and social sciences and the humanities that promise to increase understanding of the causes, manifestations, and control of violence, aggression, and dominance. Particular questions that interest HFG concern violence, aggression, and dominance in relation to social change, the socialization of children, intergroup conflict, interstate warfare, crime, family relationships, and investigations of the control of aggression and violence. Grants are awarded to individuals, and are normally in the range of \$15,000 to \$30,000 per year for one or two years.

Horowitz Foundation for Social Policy

Research Grants

Deadline: January 31 annually

Grants are awarded for work in major areas of the social sciences, including anthropology, area studies, economics, political science, psychology, sociology, and urban studies, as well as newer areas such as evaluation research. Preference will be given to projects that deal with contemporary issues in the social sciences and issues of policy relevance.

In addition to the research grants, six special awards are offered which carry an additional stipend. They are:

- the Joshua Feigenbaum award. This award is for empirical research on policy aspects of the arts and popular culture, with special reference to mass communication;
- the Eli Ginzberg award. This award is made for a project involving solutions to major health and welfare problems in urban settings;
- the Harold D Lasswell award. This award is for policy related projects in international relations and foreign affairs;
- the Martinus Nijhoff award. This is awarded for studies of policy implications of scientific, technological and medical research;
- the Robert K Merton award. This award is for studies in the relation between social theory and public policy;
- the John L Stanley award. This is awarded for work that seeks to expand understanding of the political and ethical foundations of policy research.

Grants are made for a one year period and range from \$3,000 to \$5,000 each.

CO-REACH Social Science Collaborative Research between Europe and China

The CO-REACH Social Science Programme aims to bring together Chinese and European researchers, working in the social sciences and in part of the humanities, to collaborate on a joint topic of mutual interest, and to explore the possibilities of future co-operation in these areas. It is open both to European and Chinese scholars experienced at collaborating together and to those with little or no previous experience of China-Europe collaboration.

CO-REACH (Co-ordination of Research between European and China) is a network of European S&T policy and funding organisations involved in promoting research co-operation with China. It is supported by the European Commission as an ERA-NET Co-ordination Action. The network is intended to improve coherence and synergy in Europe's S&T relations with China.

Funding

Austria (The Austrian Federal Ministry of Education, Science and Culture)
Finland (The Academy of Finland)
France (French Ministry of Foreign Affairs and French Ministry of National Education, Higher Education and Research)
Germany (Federal Ministry of Education and Research and the Deutsche Forschungsgemeinschaft)
The Netherlands (Royal Netherlands Academy of Arts and Sciences and Netherlands Organisation for Scientific Research)
United Kingdom (The British Academy, the Economic & Social Research Council, and the Arts & Humanities Research Council)
China (Chinese Academy of Social Sciences)

partners:

Thematic priorities:

- Law, Governance and Policy Making
- Participation, Co-determination and Quality of Life
- Labour Market Change, Migration and Social Cohesion
- Demography, Family and Social Welfare
- Cultural Heritage

What is covered :

- Research visits
- Workshops, seminar series, summer schools
- Minor research costs (small-scale field work, data sets, consumables, small equipment, some personnel costs).

Full details of eligible costs for UK applicants are available on the following website: www.britac.ac.uk/intl/co_reach_ssprogramme_costs.html

Application process and further details: For further information and access to the electronic application process, please consult the CO-REACH website: www.co-reach.org

UK Applicants interested in the programme should contact Sharon Strange at the British Academy for further information. Contact names are available for advice on potential Chinese partners.

Telephone: 020 7969 5220
 Fax: 020 7969 5414

E-mail: united.kingdom@co-reach.org

International Index of Grants and Fellowships

External funding agencies - funding databases, Social Sciences and Humanities funding sites, Science and Technology research sites, Health and Social Science development sites

South Asian Research Network for Social Sciences and Humanities

Papers on Proposal funding

American Indian Research and Development, Inc ? Research Opportunities

European Science Foundation. Funding for all subjects

Research Organisations

Grants Online database

Single access point for over 900 grant programs offered by the 26 federal grant-making agencies

Institute of International Education - Fulbright

Fellowship programs

Opportunity for research funding in Operations Research/Management Studies

Research funding agencies ? List with URLs

U.S. Research Funding Agencies

Research funding ? articles, definitions and directories

U.S. Dept. of Health and Human Services ? Grants and funding

Overview of research funding services ? University of Limerick

Faculty and Research : Writing a grant proposal, writing tips and application forms ? NIH, NSF, National Cancer Institute, National Institute of Infectious diseases?

Grants information collection ? Proposal writing : Internet resources

Non-governmental, Research, Federal and other sites

Grants and grant writing ? articles

Grant Source Library : Grant writing help ? Links to many online writing guides and tutorials

Writing guides ? Quantitative and qualitative research

Writing tips

A site devoted to providing free resources for both advanced grant writing consultants and inexperienced nonprofit staff

Funding and proposal writing for Social Sciences, Faculty and Graduate student research

Guide for writing a proposal

Links to proposal writing resources

Selected Proposal writing websites ? Proposal writing manuals, guides, writing workshops, bibliographies of books, resources on proposal writing and writing aids

Grant resources, researching and identifying grant making organizations

Writing a good grant proposal

Proposal writing ppt

Proposal writing and research development: Proposal development tasks, helpful agencies, resources and useful sites

http://www.shodh.net/index.php?option=com_content&view=article&id=8:subscription-fee-&Itemid=25

Indian and European Research Team
COLLABORATIVE RESEARCH OPPORTUNITIES (22/08/2014)

Joint collaborative research projects involving Indian and European research teams can be supported by different schemes:

- Horizon 2020, the new Research and Innovation Framework Programme of the European Commission,
- EU-India coordinated calls for proposals (published under Horizon 2020),
- the Inno Indigo multilateral funding platform, and
- bilateral initiatives of EU member states.

- **Horizon 2020**

As the previous EU Framework Programmes, Horizon 2020 (2014-20) offers a broad range of collaboration opportunities to Indian researchers from the public and private sectors. For more information on Horizon 2020, see the [related website](#), which includes in particular:

- [general reference documents](#) such as all chapters of the Work Programme 2014-15, model grant agreements, etc., and
- "[Participant Portal](#)" which provides potential participants with the necessary information and IT tools to concretely apply for participation in Horizon 2020.


- **Co-ordinated calls for proposals**

Under the previous EU framework programme ("FP7" – 2007-13), five "coordinated calls for proposals" totalling 60 M€ have been successfully organised by the EU and India, with roughly equal participation and funding from each side. Under Horizon 2020 as well (for the EU side), a number of coordinated calls should be organised jointly with Indian authorities. Under this scheme, each side is funding its own participants. New calls will be published on the website as and when made public.


- **Inno Indigo multilateral funding platform**

Until 2013, [New Indigo](#) provided both information on research collaborations between India and the EU, and funding for collaborative projects, through specific calls for proposals. Funding for the joint research projects was provided by several EU member states and India (DST, DBT).

From 2014, this project is being extended/replaced by [Inno Indigo](#), while the new [Indigo Policy](#) provides assistance at policy level (both until 2016).

This comprehensive [brochure](#)  [748 KB] summarises a broad range of collaboration opportunities open to Indian researchers and research organisations – especially under the new Horizon 2020 programme, but also under other schemes.

- **Bilateral opportunities offered by EU member states**

Information on funding opportunities offered by the EU and its Member States can be found in a detailed [Overview of EU and member states R&I cooperation with India](#) .

For more information on EU Member States' R&I policies and funding opportunities, please visit their

respective websites:

[Austria](#)

[Belgium](#)

[Bulgaria](#)

[Croatia](#)

[Cyprus](#)

[Czech Republic](#)

[Denmark](#)

[Estonia](#)

[Finland](#)

[France](#)

[Germany](#)

[Greece](#)

[Hungary](#)

[Ireland](#)

[Italy](#)

[Lithuania](#)

[Luxembourg](#)

[Malta](#)

[Netherlands](#)

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[Poland](#)

[Portugal](#)

[Romania](#)

[Slovakia](#)

[Slovenia](#)


[Spain](#)

[Sweden](#)

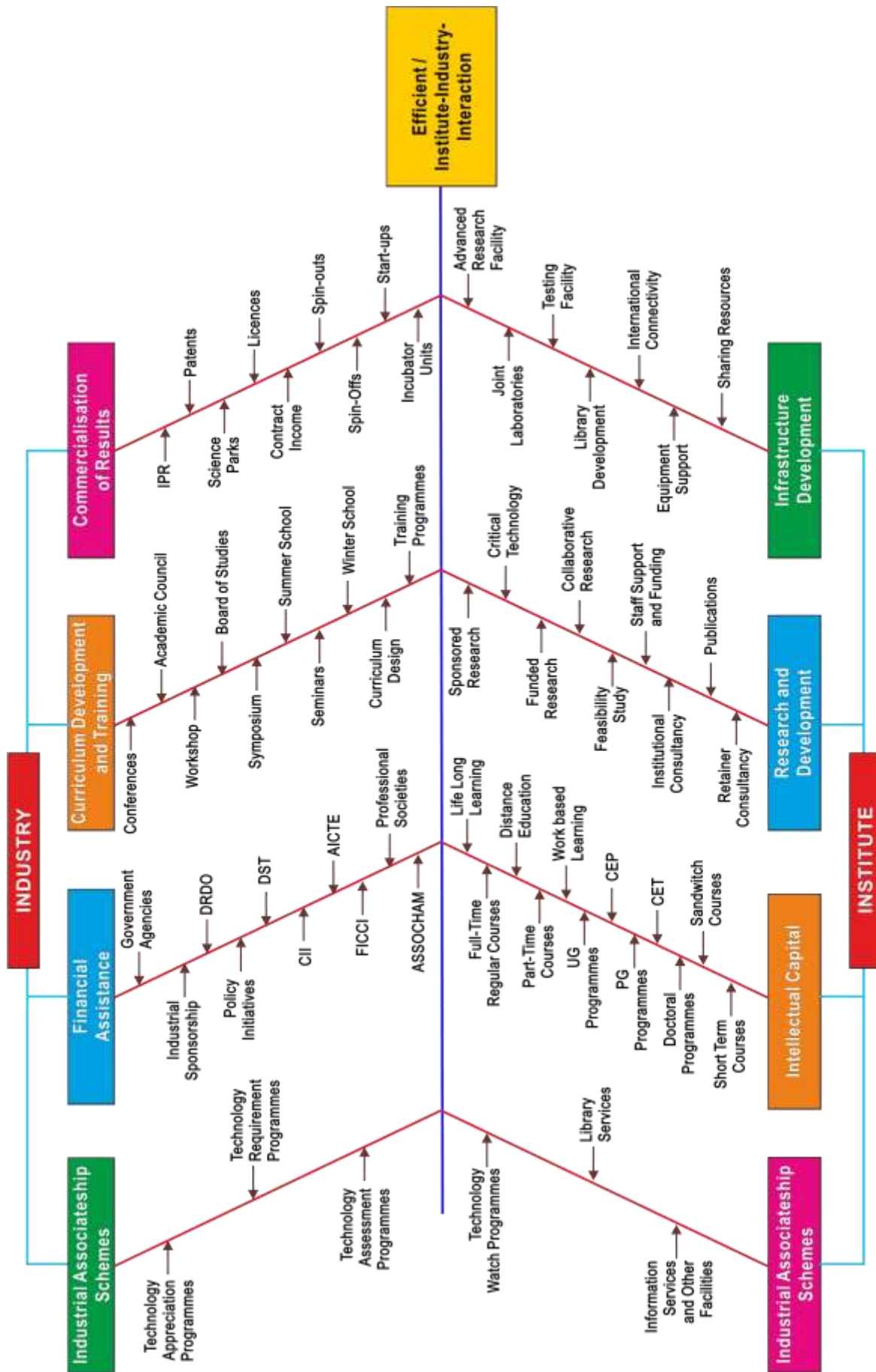
[United Kingdom](#)

- **History**

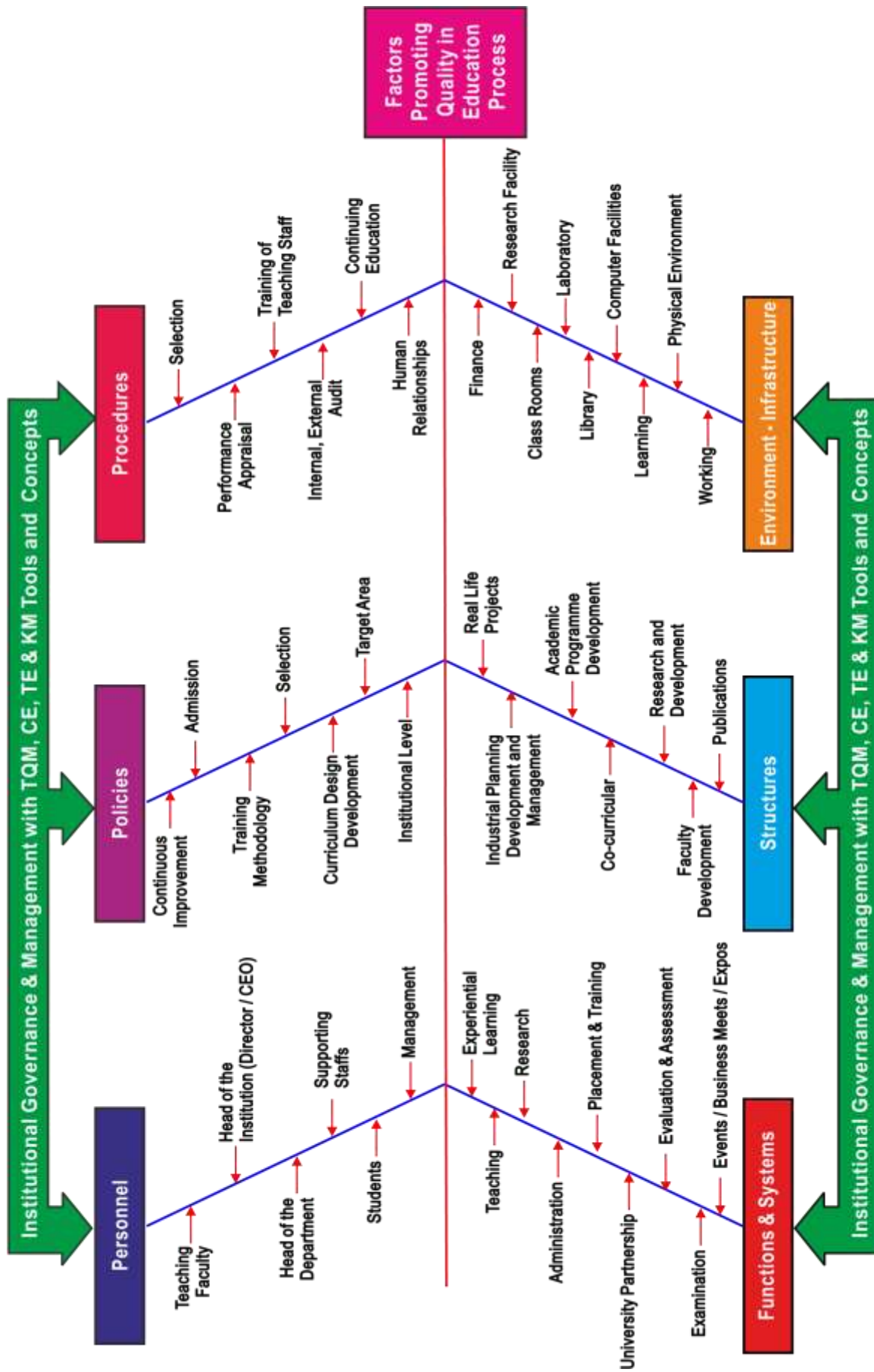
Under FP7, the previous Framework Programme of the European Commission (2007-13), Indian participation has been quite strong:

- More than 200 Indian entities participated in collaborative R&D projects (see [catalogue](#) ) , receiving about 40 M€ of EU funding;
- 5 coordinated calls for proposals were jointly organised with Indian authorities, resulting in several additional joint projects;
- About 1600 Indian researchers enjoyed [Marie Curie fellowships](#) (promoting the mobility of researchers);

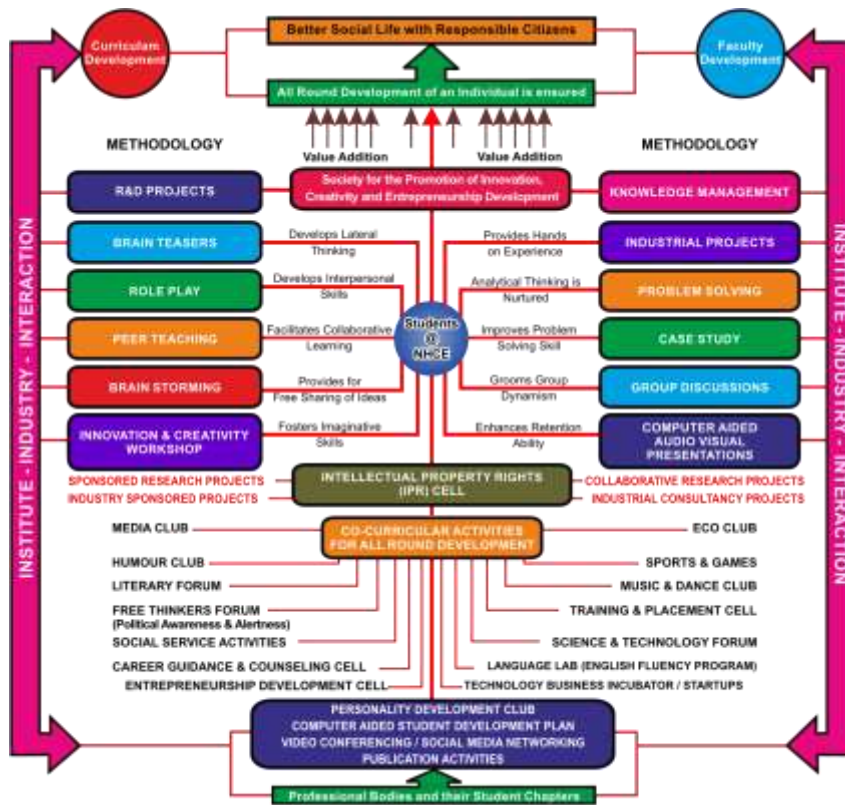
- *173 Indian nationals applied for an ERC grant, of which 18 received one. The European Research Council ([ERC](#)) – a new component of FP7 – focuses on fundamental research and aims at stimulating scientific excellence.*



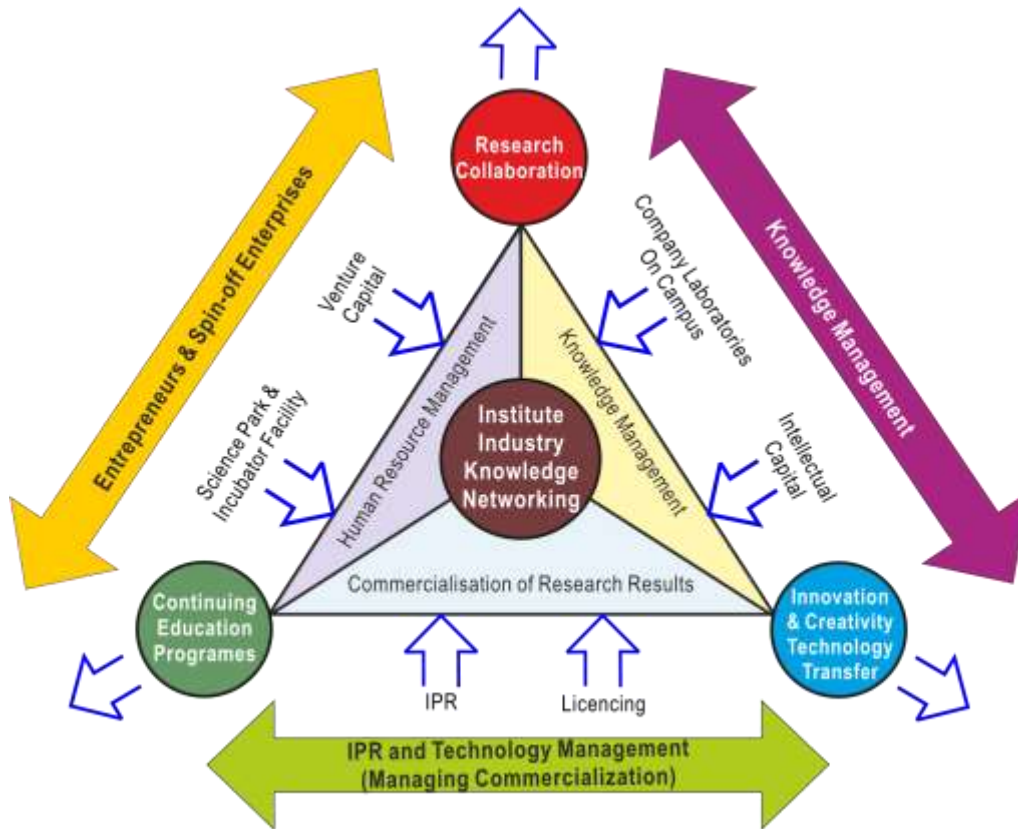
Cause and Effect Diagram Demonstrating Salient Features of Effective Integrated Institute-Industry-Interface® @ NHCE



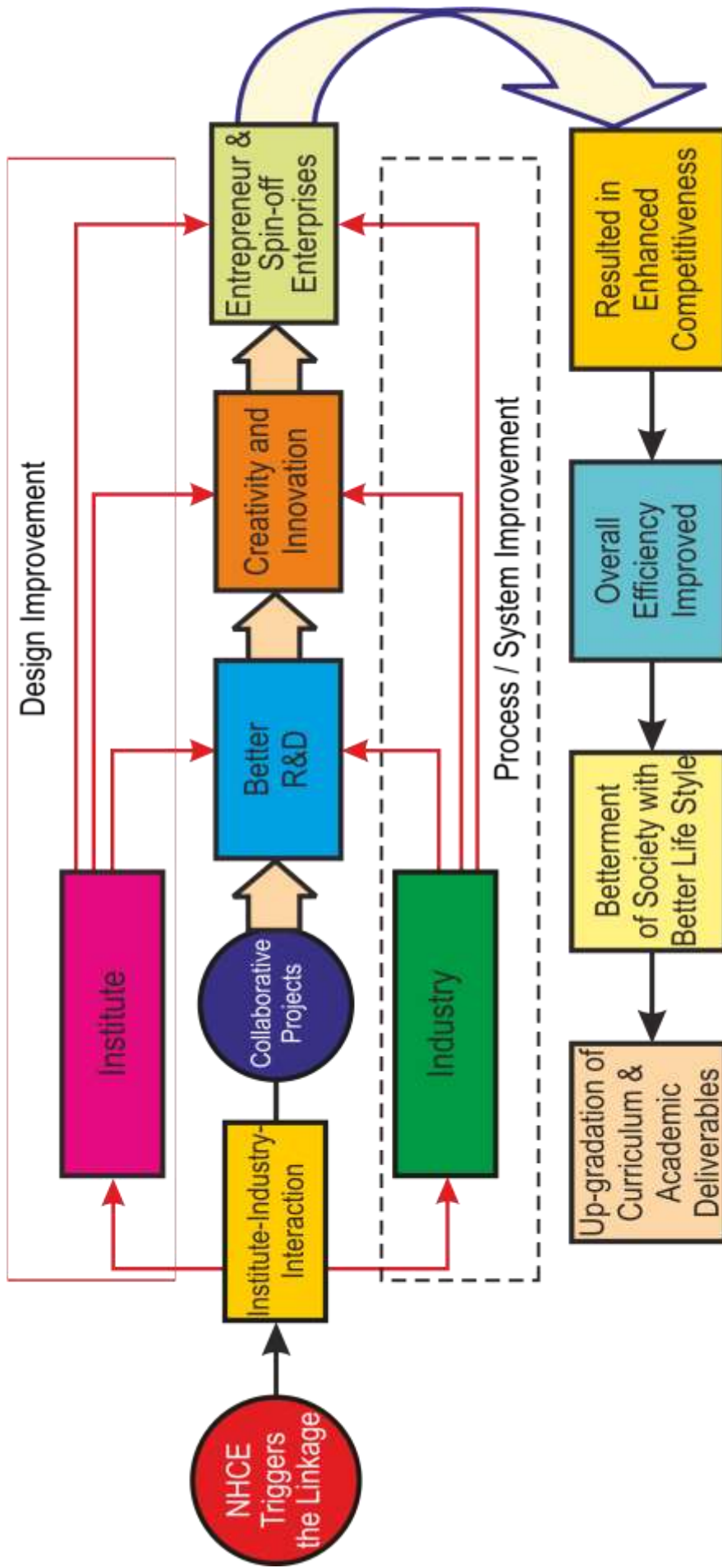
Various Factors Promoting Quality in Education Process @ NHCE



Process Approach Learning Model for Overall Development of Students @ NHCE



Competitiveness Model of Institute-Industry-Collaboration (IIC) @ NHCE



Institutional Transformation for Excellence in Corporate Education @ NHCE

Proposed Calendar for PhD Research Scholars – A Road Map for the PhD Process

Month	Have Daily, Weekly, Fortnightly, Monthly, Quarterly and Half Yearly Plans / Mile Stones and Monitor it Periodically
Month 1	<p>Literature Review (LR) Phase I</p> <p>Give Priority to net based on-line search</p> <p>Go to Instructions for more details (separately attached)</p>
Month 2	
Month 3	
Month 4	
Month 5	
Month 6	
Month 7 DC2 ^{optional}	<p>Literature Review (LR) Phase II</p> <p>II – Paper Publication based on LR – 2 (P2)</p>
Month 8	
Month 9	
Month 10	
Month 11	
Month 12	
Month 13 DC3	<p>Comprehension Oral Examination (COE)</p> <p>Without finalizing problem definition & without one publication, it is very difficult to pass the COE.</p>
Month 14	
Month 15	
Month 16	
Month 17	
Month 18	
Month 19 DC4 ^{optional}	<p>Intensive Study Phase (Major Work): III – Paper Publication – P3 (Journal / Conference) OR Efforts to file a Patent(s)</p> <p>Findings of the Study – Outcome of in-depth investigation</p> <p>IV – Paper Publication – P4 (Journal / Conference OR Efforts to file a Patent(s))</p> <p>Results / Verification / Validation / Consolidation / Documentation / Chapterisation / Soft Copy Ready</p> <p>Preparation of Synopsis</p> <p>Final Draft – Review</p> <p>Submission (with the recommendation of Doctoral Committee)</p> <p>(10 + 2 + 4 + 2) / (10 + 2 + 3 + 2 + 1) / (10 + 2 + 4 + 2) candidates</p>
Month 20	
Month 21	
Month 22	
Month 23	
Month 24	

Read atleast 1 Research Paper a day / two.
 Within 3/6 months atleast 100-150 papers should be read and simultaneously collect 150- 200 references and extract / essence to make a chapter on "Literature Review" and Bibliography / References for the Final Thesis.

Literature Review → **10%** → **20%** → **1**

Based on the solid Literature Review, Evolve a problem/formulate problem for further investigation

Literature Review → **15%** → **25%**

Problem Definition → **10% Over** → **2**






Identification / Selection / of Tools / Techniques / Experimental Setup / Real Study Work Starts.

Methodology → **10% Over** → **3**

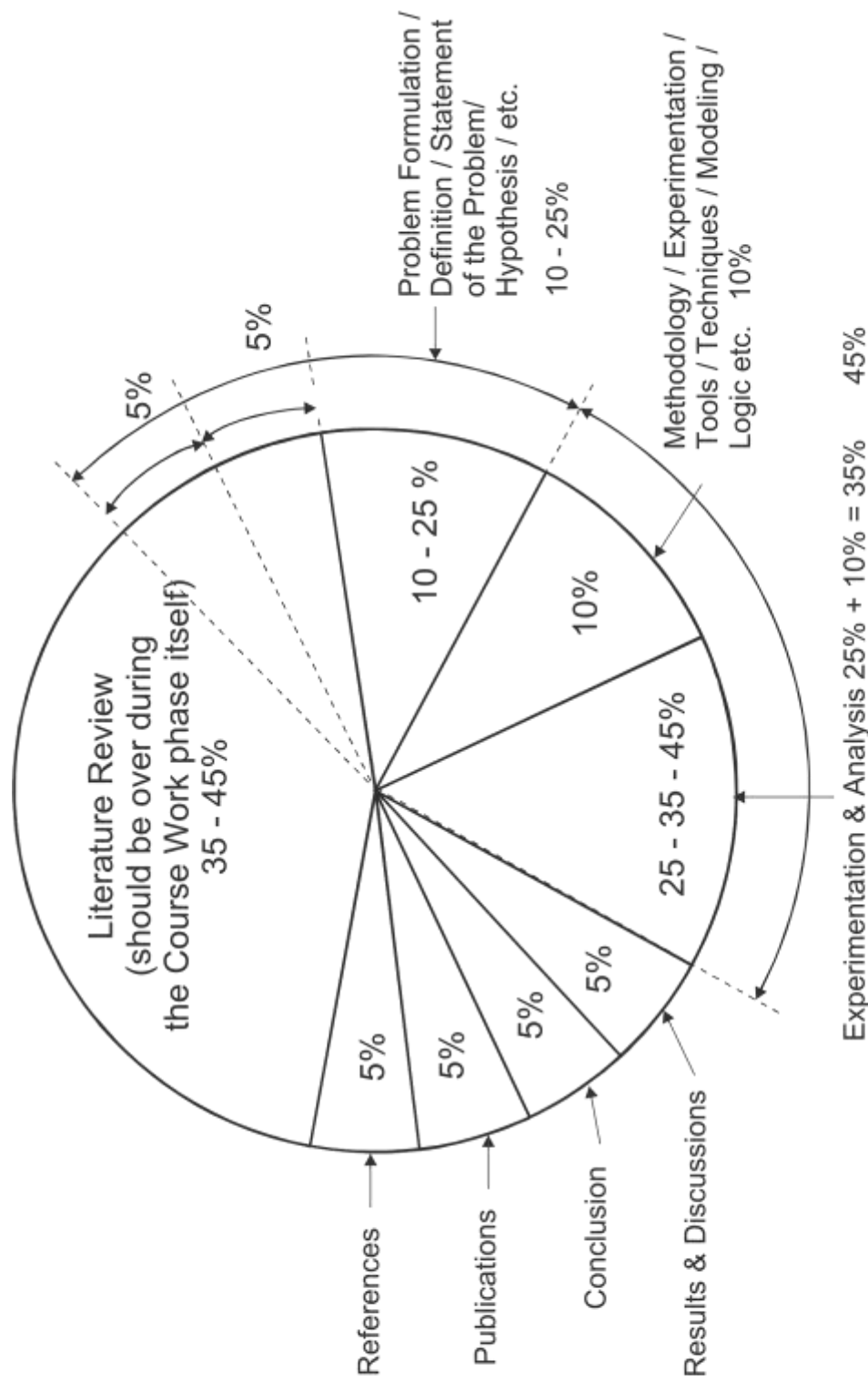
Analysis / Experimentation → **35%** → **45%** → **4**

Documentation → **20% Over** → **5**

100% Over

Month 25	DC5	Documentation / Chapterisation / Soft Copy Ready Preparation of Synopsis Final Draft – Review	Submission (with the recommendation of Doctoral Committee) (10 + 2 + 4 + 2) / (10 + 2 + 3 + 2 + 1) / (10 + 2 + 4 + 2) candidates (OR) Request for Extension (6 Months)	If not 100% over	
Month 26					
Month 27					
Month 28					
Month 29					
Month 30					
Month 31	DC6	Documentation / Chapterisation / Soft Copy Ready Preparation of Synopsis Final Draft – Review	Submission (with the recommendation of Doctoral Committee) (10 + 2 + 4 + 2) / (10 + 2 + 3 + 2 + 1) / (10 + 2 + 4 + 2) candidates (OR) Request for Extension (6 Months)	If not 100% over	
Month 32					
Month 33					
Month 34					
Month 35					
Month 36					
Month 37	DC7	Documentation / Chapterisation / Soft Copy Ready Preparation of Synopsis Final Draft – Review	Submission (with the recommendation of Doctoral Committee) (10 + 2 + 3 + 2) / (10 + 2 + 3 + 3) candidates (OR) Request for Extension (6 Months)	If not 100% over	
Month 38					
Month 39					
Month 40					
Month 41					
Month 42					
Month 43	DC8	Documentation / Chapterisation / Soft Copy Ready Preparation of Synopsis Final Draft – Review	Submission (with the recommendation of Doctoral Committee) (10 + 2 + 3 + 2) / (10 + 2 + 3 + 3) (OR) Request for Extension (6 Months)	If not 100% over	
Month 44					
Month 45					
Month 46					
Month 47					
Month 48					
4 years	Maximum Period is 5 Years from the date of Registration				

The suggested weightage in Percentage of the Final Thesis / PhD Work



Quality of work should be preceded always by quantity of work.

Your attitude towards PhD Research Programme will decide your altitude in research.

Note : The above representation is only suggestive in nature. The percentage will vary with respect to individual, specific nature of research work.

LITERATURE REVIEW – SOME USEFUL INSTRUCTIONS

When you are making notes from Journal / Conference Papers / Articles, the salient features of each research paper / article, simultaneously, key in everything in your own system or in office / institution periodically. Always make sure in keeping two or more soft copy in different folder and periodically copy it and update it in 2 CDs (1 for emergency backup) and or in thumb drive (Memory Stick – USP Drive / Removable Disc). It will be very useful in most of the cases where there is no CD writer and the file size is too large). Also, periodically update the entire matter in your own e-mail account, preferably in your G-mail Account.

Ensure the safety of data entered into the system. Till you compile and prepare the final thesis and take printout after having two or more soft copy is always advisable to avoid loss of valuable data and time (Which is more precious, and that is not a reversible process).

PLAN

Daily / Weekly / Fortnightly / Monthly

Read at least one research paper a day (If it is not possible at least in 3 days).

With in 6 months at least 100-150 paper should be read and try to have at least 150-200 references and excerpts / core ideas to make a chapter on "LITERATURE REVIEW". The same consolidated report on Literature Review can be a paper for publication in National / International Journals.

EXTENSIVE & INTENSIVE, LITERATURE REVIEW

Consolidate the notes of Literature Review with appropriate references (Primary & Secondary sources). You have to do this exercise, simultaneously, meticulously, whenever you are reading / studying a review / research papers from journal / conference proceedings.

At periodic intervals, it can be typed in a computer and updated accordingly.

Take care, of relevant references (Bibliography). Always, maintain all the references, with one common standard format. By doing this, at the end of the first year of your research career, you will have 45% of the content (Two major Chapters of your final thesis) of your thesis is ready. With which, you can publish one or more papers. A good / serious literature review will lead to a publication. Easily a paper can be made out of it.

Normally, such papers can be titled as any one of the following;

- Study on
- Studies on
- Analysis on the study of

Almost, all the leading international journals will publish such an extensive study with good literature support and seriousness. Even, at the International Conferences it could be presented.

List of References - Any works of other researchers are used either directly or indirectly the origin of the material thus referred to at appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate place of reference. The citation may assume anyone of the following forms.

Examples of Citation

An improved algorithm has been adopted in literature (Tsychiya 1980)

Jankins and Walts (1968) have dealt at length this principle.

The problem of mechanical manipulators has been studied by Shin et al (1984) and certain limitations of the method used, has been pointed out by Shin et. al. (1984 a).

The listing should be typed 4 space below the heading "REFERENCES" in alphabetical order in single spacing left justified. Threference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the year and other details. A typical illustrative list given below relates to the citation example quoted above.

REFERENCES

1. Aripnammal S. and Natarajan S. (1994) "Transport Phenomena of Sm Se_{1-x} As_x" Pramana - Journal of Physics Vol. 42 No.5 pp.421-425.
2. Barnard R.W. and Kellogg C. (1980) "Applications of Convolution operators to Problems in univalent function theory", Michigan Mach. J., Vol 27, pp 81-94.
3. Jankins G.M. and Walts D.G. (1968), "Spectral Analysis and its Applications" Holder Day, Sanfrancisco.
4. Shin K.G. and Mckay N.D. (1984), "Open loop minimum time control of mechanical manipulations and its applications", Proc. Amer. Contr. Conf., San Diego, CA, pp.1231-1236.

Intellectual Property Rights (IPR)

If you are looking for an innovative outcome, then, there is no need for making efforts to publish any of your ideas / solutions in either conferences / journals. Then try to file a patent(s) in the course of your research study.

REGULATIONS

REGULATIONS (AMENDED) GOVERNING THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph. D)

(With effect from 2014)



**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,
"Jnana Sangam" BELAGAVI-590018, KARNATAKA**

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM
REGULATIONS (AMENDED) GOVERNING THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph. D)
(With effect from 2014)

Section No.	Amended Regulations
<p>Ph.D.-1 Ph.D.-1.1 Ph.D.-1.2 Ph.D.-1.3 Ph.D.-2 Ph.D.-2.1</p>	<p>SHORT TITLE AND COMMENCEMENT</p> <p>These Regulations shall be called “VTU Regulations Governing the Degree of Doctor of Philosophy (Ph.D.) - 2014”.</p> <p>These shall come into force from the date of their notification by the University and be applicable for the candidates who seek registration for Ph.D. in the Faculty of Engineering, Faculty of Architecture, Faculty of Science (Physics /Chemistry/mathematics /Library Science /Physical Education and Computer Applications), and Faculty of Management Studies.</p> <p>All correspondence concerned Ph.D. like Reports/presentation /Thesis shall be in English language only.</p> <p>DEFINITIONS</p> <p>In these Regulations unless the context requires otherwise or it is specifically so defined:</p> <ol style="list-style-type: none"> a) High Power Committee means a committee constituted by the University to govern the activities Ph.D. programme. b) Admission Committee means a committee constituted by the University to carry out the activities concerning the admission of candidates to the Ph.D. programme. c) AICTE means the All India Council for Technical Education, established at New Delhi by an Act of Parliament in 1987. d) AIU means the Association of Indian Universities, with its headquarters at New Delhi. e) Coursework means the courses prescribed as a part of the Ph.D. programme, which all the candidates shall successfully complete as a pre-requisite. f) Co-Guide means the additional Research Guide who supervises/guides the doctoral research of a candidate along with the Research Guide. g) Degree at Undergraduate/ Postgraduate/ Doctor of Philosophy level means UG/ PG/ Ph.D. in abbreviated form.. h) Doctoral Committee means the committee constituted by the University to review the research progress of a candidate.

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| | <p>i) Dual Degree means two Degrees, viz., M.Sc. (Engg.) By Research /Master of Engineering (ME)/Master of Technology (M. Tech.) /Master of Architecture (M. Arch.) and Ph.D. for which registration has to be made concurrently.</p> <p>j) FIP means the Faculty Improvement Programme of the UGC.</p> <p>k) GOI means the Government of India in abbreviated form.</p> <p>l) GoK means the Government of Karnataka in abbreviated form.</p> <p>m) Intake means the number of students sanctioned for admission to a Research Centre/Faculty of the University in a year.</p> <p>n) NRI/FN/PIO means Non-Resident Indian/Foreign National/Person of Indian Origin categories in abbreviated form.</p> <p>o) QIP means the Quality Improvement Programme of the GOI.</p> <p>p) Research Guide means a qualified faculty member / scientist recognised by the University to supervise/guide the Ph.D. /M.Sc. (Engg.) By Research candidates.</p> <p>q) Research Centre means a College / Institute / Department / Research establishment and the like, recognized by the University for the candidates to pursue Ph.D. in an approved discipline.</p> <p>r) VTU-RRC: Visvesvaraya Technological University- Research Resource Center</p> <p>s) Refereed Journal means a reputed professional journal or literary journal or publication in which the research articles or papers are selected for publication by a panel of referees who are experts in the field.</p> <p>t) UGC means the University Grants Commission established at New Delhi by an Act of Parliament in 1956.</p> <p>u) VRAT means VTU Research Aptitude Test conducted by the University for short listing the merit list of candidates for admission to the Ph.D. programme.</p> <p>v) University means the Visvesvaraya Technological University (VTU), with its Headquarters at Belagavi, Karnataka.</p> <p>w) Viva Voce Board means a committee of experts appointed by the University to conduct the final viva-voce on the Thesis submitted by the candidate.</p> |
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Ph.D.-3	<p>BOARDS AND COMMITTEES</p> <p>Constitution of Boards/Committees</p>
Ph.D.-3.1	<p>The University shall constitute the following Boards and Committees for monitoring the Ph. D.</p>
	<ul style="list-style-type: none"> a) Programme: b) High Power Committee c) Admission Committee d) Doctoral Committee e) Viva Voce Board and, f) Such other Boards/Committees, as may be required.
Ph.D.-3.1.1	<p>The composition, duties and responsibilities of the Boards and Committees are as given below:</p>
	<p>High Power Committee</p> <p>The High Power Committee shall be constituted by the Vice-Chancellor. The scope of the committee shall be,</p> <ul style="list-style-type: none"> a) To lay down the policy connecting Ph.D. regulations from time to time. b) To resolve any issues raised by the Admission Committee or issues referred by the Registrar, VTU, Belgaum c) Any other related matter.
Ph.D.-3.1.2	<p>The tenure of the committee shall be 3 years. The committee may meet as often as required, subject to a minimum of two meetings in an academic year.</p>
	<p>Admissions Committee</p> <p>The Admissions Committee to be constituted by the Vice Chancellor for each Faculty, shall consist of:</p> <ul style="list-style-type: none"> 1. Dean of the Faculty, -Chairperson 2. Nominee of the Executive Council, -Member 3. Nominee of the Academic Senate, -Member 4. Nominee of the Vice Chancellor, -Member 5. Registrar, -Member Convener <p>The Admission Committee shall be responsible for :</p> <ul style="list-style-type: none"> a) Scrutinising applications for the exemption of VRAT (VTU Research Aptitude Test) as per regulations 10.2. b) Scrutinising applications for eligibility for Ph.D. Program. c) To scrutinize the eligibility of Guide /Co-Guide. d) Constituting an Expert team as required for Pre-registration Presentations. e) Approving the number of candidates under each Guide after VRAT and Presentation. The tenure of the Committee shall be 2 years. The Committee shall meet as often as required.
Ph.D.-3.1.3	<p>Doctoral Committee: (Region Wise / Institute)</p> <p>The Head of the Institute shall constitute a Doctoral Committee for each candidate and shall have the following composition:</p> <ul style="list-style-type: none"> 1. Head of the Institute, -Chairperson (or his/her Nominee approved by the Principal) 2. Two domain experts, (at least one external expert) may be identified by the Head of the

<p>Ph.D.-3.1.4</p> <p>Ph.D.-4</p> <p>Ph.D.-4.1</p>	<p style="text-align: center;"><i>Institution /Research Center Head on the recommendations of the Research Guide from time to time.</i></p> <ol style="list-style-type: none"> 3. Research Guide, -Member-Convener 4. Co-Guide (if any), -Member <p><i>All the expenses related to doctoral meeting shall be borne by the institute where the candidate has registered for his/her Ph.D. Program.</i></p> <p>VTU-RRC</p> <p><i>Doctoral Committee for VTURRC is to be constituted by Vice-Chancellor , VTU, Belgaum</i></p> <ol style="list-style-type: none"> 1. Dean -Chairperson <i>(or his/her Nominee appointed by the Vice-Chancellor)</i> 2. Two Domain experts, from the PG Centre (at least one external expert). 3. Research Guide -Member 4. Co- Guide (if any) -Member <p><i>The Doctoral Committee may be re-constituted by Head of Institute/Dean in the case of nonavailability of existing member(s) or for any other valid reason, in consultation with the Research Guide(s). The Doctoral Committee shall be responsible for reviewing and monitoring the progress of the candidate from his/her commencement of Ph.D. research to submission of the Thesis. The Committee shall be free to meet as often as required. However, The committee shall meet at least twice in a academic year. The Doctoral Committee shall send a half yearly progress report of each candidate to the University.</i></p> <p>Viva Voce Board</p> <p><i>The Viva Voce Board to be constituted by the Vice Chancellor for each candidate soon after The receipt of favorable Reports from all the adjudicators, the composition of the board shall be as follows:</i></p> <ol style="list-style-type: none"> 1. Research Guide, -Chairperson 2. Co- Guide (s), if any, -Co-Chairperson 3. Identified Adjudicator, -Member <p><i>The Board shall conduct the final Viva Voce for the candidate to defend his/her Ph.D. Thesis. The board shall submit the reports in the prescribed format to the University.</i></p> <p>SUBJECT / TITLE OF RESEARCH AND NATURE OF RESEARCH PROGRAMME</p> <p>List of Faculties</p> <p><i>The University shall permit the registration for Ph.D. in the following Faculties, namely, a) Faculty of Engineering</i></p> <ol style="list-style-type: none"> b) Faculty of Architecture c) Faculty of Science (include Nano-Technology, MCA, Library Science and Physical Education),and d) Faculty of Management Studies
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Ph.D.-4.2	<p>Inter-Disciplinary Subject Areas</p> <p>A candidate is allowed to pursue Ph.D. program in a subject area of inter-disciplinary nature subject to the approval from Admission Committee.</p>
Ph.D.-5	<p>ELIGIBILITY FOR ADMISSION</p>
Ph.D.-5.1	<p>Eligibility Requirements</p>
	<p>The eligibility requirement for candidates to get admitted to the Ph.D. Programme shall include the following:</p>
	<p>Categories of Candidates and Other Requirements</p>
Ph.D.-5.1.1	<p>There shall be provision for the following categories of candidates for admission to Ph.D.</p>
	<ul style="list-style-type: none"> a) Full-Time: Candidates who shall pursue Ph.D. research on full time basis, b) Part-Time: In-service candidates having a minimum professional experience of one year after his/her UG Degree from among faculty members working in any Engineering College / Polytechnic / University / Deemed to be University (recognized / accredited by appropriate bodies in India) or research staff of public / private organizations, are eligible to pursue Ph.D. on a part time basis. c) Full-Time/Part Time (Special): NRI/FN/PIO candidates under these groups shall be eligible for either Full Time as indicated in 5.1.1 (a) or Part Time (as indicated in 5.1.1 (b) basis) However, the candidates shall have passed the UG / PG programmes with medium of instruction in English or qualified in TOFEL/ELTS, or equivalent. The candidates shall be able to communicate and submit the thesis in English language only. d) Dual Degree: Students studying M.Sc.(Engg.) by Research /M.Tech., may be allowed to upgrade to Ph.D. as per 5.2.1 (a) or (b) as applicable. e) Distance mode: Students who have obtained PG degree in Engineering/Science disciplines through distance mode are not eligible. However, candidates with MBA & MCA degrees obtained through distance mode may be allowed as per UGC/AICTE norms in this regards.
Ph.D.-5.1.2	<p>Study leave / Employment / Clearances</p>
	<ul style="list-style-type: none"> a) Employed candidates, who take up Ph.D. Programme on full time basis, shall produce a NOC certificate from their employer-organization(s) with a sanctioned study leave of a minimum period of three years with full salary. b) Candidates not having employment, who take up Ph.D. Programme on full time basis shall be forbidden from taking up any employment during such period of Ph.D. work. However, they can apply for scholarships / fellowships / stipends, if any, with intimation to University. c) Foreign students shall hold valid passport/visa, clearance from MHRD and other agencies as mandated by the GOI throughout the duration of the course.

Ph.D.-5.2	<p>Minimum Qualifications to be Satisfied</p> <p>The minimum academic qualifications to be satisfied by the candidates seeking admission to the Ph.D. Programme, shall be as given below in respect of the different Faculties:</p>
Ph.D.-5.2.1	<p>Faculty of Engineering</p> <p>a) The candidates shall possess a Master's Degree in Engineering / Technology or equivalent from the VTU or any other University recognised by it, with a minimum CGPA of 6.75 out of 10 or First class at either the Bachelor's or the Master's Degree in Engineering & Technology discipline.</p> <p>b) The candidates pursuing M. Tech. Degree at the University who have successfully completed the prescribed coursework in the first three semesters of study with outstanding merit of either a minimum CGPA of 7.75 out of 10 or 70 % aggregate marks and demonstrated good research aptitude shall be eligible for up-gradation to M. Tech. + Ph.D. Integrated Dual Degree Programme, subject to approval by the Admissions Committee.</p>
Ph.D.-5.2.2	<p>Faculty of Architecture</p> <p>a) The candidates shall possess Master's degree in Architecture / allied specialisation or equivalent recognised by the University, with a minimum CGPA of 6.75 out of 10 or First class at either the Bachelor's or the Master's Degree in the respective discipline.</p> <p>b) The candidates pursuing M. Arch. Degree at the University who have successfully completed the prescribed coursework in the first three semesters of study with outstanding merit, having either a minimum CGPA of 7.75 out of 10 or 70 % aggregate marks and demonstrated good research aptitude shall be eligible for up-gradation to M. Arch. + Ph.D. Integrated Dual Degree Programme, subject to approval by the Admissions Committee.</p>
Ph.D.-5.2.3	<p>Faculty of Science</p> <p>The candidates shall possess M.Sc. Degree in Physics/ Chemistry/ Mathematics/Nano-Technology Library Science/ Physical Education/ MCA from a recognised University with a minimum CGPA of 6.75 out of 10 or First Class at either the Bachelor's or the Master's Degree.</p>
Ph.D.-5.2.4	<p>Faculty of Business Administration</p> <p>The candidates shall possess MBA Degree from the recognized University with a minimum CGPA of 6.75 out of 10 or First Class degree in MBA.</p>
Ph.D.-5.3	<p>Relaxation of Minimum Requirements</p> <p>A candidate belonging to SC / ST / Category-I / Physically challenged or any other reserved category as notified by GOK from time to time shall have a relaxation not exceeding 5 % or equivalent grade in the minimum prescribed qualification level for the general category of students.</p>

Ph.D.-6

Ph.D.-6.1.1

RECOGNITION / FUNCTIONING OF RESEARCH GUIDE

Procedure for Recognition

- a) *Persons seeking recognition as a Guide / Co- Guide shall apply in the prescribed format to University for their recognition as a Guide / Co-Guide through the Head of the Institution.*
- b) *The guide/co-guide seeking to guide research students shall possess BE/B.Tech as basic degree in relevant field to guide Ph.D. candidates in the faculty of Engineering. The guide/co-guide seeking to guide research students in Science Faculty shall possess B.Sc./B.Lib/BPED/BCA or equivalent degree in relevant field. The guide/co-guide seeking to guide research students in Faculty of Architecture shall possess B.Arch or equivalent degree in relevant field. The guide/co-guide seeking to guide research students in Faculty of Management may have any basic degree at UG level with MBA from recognised university.*
- c) *Guide/co-guide shall possess Masters degree and Ph.D. in relevant field of Faculty awarded by Universities recognized by VTU.*
- d) *Research students can opt a **co-guide** having basic degree, Masters degree and Ph.D. from Faculty other than the stream considered for admission, provided the topic of research is of interdisciplinary kind and the fact that co-guide can contribute to guidance with his/her expertise. However the **guide** shall be of same Faculty as indicated in Ph.D. 6.1.1 (a) and (b). The decision of admission committee in this matter is final and binding on the matter of allotment of co-guide.*
- e) *A research student can opt for one guide and one co-guide only. Multiple co-guides are not permitted to guide a single research student.*
- f) *The age for recognizing such a Guide / Co- Guide shall be limited to not more than 65 years as on the re-opening day of that academic year.*
- g) *The person seeking recognition as a Guide/ Co- Guide shall be a full time staff member of an Institution working in the Department which is recognized by the University as a Research Centre, or an employee working in a recognised organization/institution registered in VTURRC.*
- h) *The Guide/ Co- Guide seeking recognition to Guide/ Co- Guide a candidate shall be declared eligible only on the recommendation of the Admission Committee of the University.*
- i) *If the Guide/ Co- Guide is transferred, retired or resigned before a Research Scholar submits the thesis, the Admission Committee may permit the Scholar to continue to work under the earlier Guide/ Co-Guide or permit an alternative arrangement with the consent of all the concerned.*
- j) *In the case of the Guide / Co- Guide not being available for a period of more than six months*

(for reasons like going abroad, ill health, etc) and if the Research Scholar desires to choose a new Guide / Co-Guide, the Research Scholar may apply to the University enclosing the consent of the earlier and the proposed Guides, which shall be considered by the Admission Committee of the University.

- k) In case of death of the Guide/ Co- Guide, the Research Scholar shall identify a substitute Guide/ Co-Guide and send an application to the University along with the consent letter of the new Guide and head of institution/organisation.
- l) The Admission Committee may consider such applications received under any of (e), (f) and (g) regulations and permit the Research Scholar to have an alternative Guide/ Co- Guide. If the Committee accepts the request, the University shall communicate the same to the Research Scholar, Guide/ Co-Guide and the Research Centre. In case the Committee does not approve the request, then the reasons for the same along with further directions to enable the Research Scholar to continue research shall also be communicated.
- m) Organisations/Industries/affiliated Colleges subject to the approval of Admission Committee. However, the degree shall be awarded in the area of Research, which forms a major part of his / her research, as decided by Admission Committee.
- n) If a Person seeking recognition as a Guide/Co-Guide has a Ph.D. from a foreign University then he/she shall produce a copy of passport, visa details , proof of registration to Ph.D. and proof of stay in the foreign country
- o) Registered Guide/Co-Guide shall send updated information in prescribed format, while forwarding the application of Research Scholar.
- p) A research guide or co-guide may be disqualified to guide research students in VTU upon complaints received and investigation completed in case of fake degree/information provided to VTU and in case of proven harassment of students by the guide. Vice-Chancellor may appoint a committee to investigate such cases and submit the report.
- q) The following acts of research guide may lead to disqualification of guide from guiding any research student.
- Influencing the external examiner to write favourable report on thesis.
 - Making effort to intervene in external examiners evaluation work.
 - Writing thesis valuation report on behalf of external examiners and making arrangements to send the such reports from External Examiners.

MODALITIES

- a) Prescribing fee for registration, course work examinations, fees for dissertation evaluation & pre-Ph.D. comprehensive Viva-Voce schedule, submission of periodic progress reports, change of topic and /or Guide/Co-Guide, submission of thesis, calendar of events and such

	<p>other matters relating to any of the above shall be governed by the administrative orders issued by the University from time to time.</p> <p>b) Not with standing any of the above regulations, the Vice-Chancellor shall be empowered to take suitable decisions based on the merit of the individual cases.</p> <p>Ph.D.-6.2. Functioning of Research Guide</p> <p>Ph.D.-6.2.1 There shall be a possibility for assigning a Research Guide and Co- Guide for a candidate registered for the Ph.D. Degree at a Research Centre in special cases, as may be decided by the Admission Committee.</p> <p>Ph.D.-6.2.2 Guide and Co-Guide, with either of them being from the Research Centre where the candidate has registered for Ph.D.</p> <p>Ph.D.-6.2.3 No person shall guide his/her blood relative or spouse for Ph.D., as defined by VTU.</p> <p>INTAKE</p> <p>Ph.D.-7 Number of Candidates per Research Guide</p> <p>Ph.D.-7.1 The following norms / procedure shall be strictly adhered to while assigning the Research Guides to the candidates admitted at a Research Centre. Any violation of these norms/ procedure shall result in the University taking serious steps like de-recognition of the Research Centre or the Research Guide.</p> <p>(a) Each Research Guide shall supervise not more than 08 candidates, (including reservation category & Co-guide) at a time including the candidates who have registered for Ph.D. degree at other Universities (acceptance for supervision of Ph. D. students at other Universities shall be with the written permission of the University).</p> <p>(b) The students of a research guide who have completed the final Viva-Voce shall not be considered while counting the number of candidates assigned to a Research Guide.</p> <p>(c) A Research Guide shall not be assigned more than two newly admitted candidates during an academic year.</p> <p>(d) Under special consideration, admission committee may recommend upto four candidates at once to a guide with proper reasoning. This extraordinary case shall be exercised carefully by the admission committee and must be approved by high power committee.</p> <p>Ph.D.-7.2 Change of Research Centre</p> <p>There candidates are allowed to shift from one Research Centre to another within the University due to reasons like, lack of research facilities, non-availability of Research Guide(s). In all such cases, the decision of the Admission Committee shall be final and binding.</p>
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Ph.D.-8 Ph.D.-8.1	<p>NOTIFICATION</p> <p>University Notification</p> <p>The University may call for Applications for Admissions normally in the months of January and June of every academic year.</p>
Ph.D.-9 Ph.D.-9.1	<p>SUBMISSION OF APPLICATIONS AND THEIR PROCESSING</p> <p>Applications from the eligible candidates shall be submitted as follows:</p> <p>Submission of Applications to the University</p> <p>The eligible candidates satisfying the Regulation Ph.D.- 5 shall submit their applications for admission to the University in the prescribed format along with other necessary documents; viz., attested copies of degree certificate(s), marks cards of all related examinations, employer's certificate if employed, and such other documents as may be prescribed.</p>
Ph.D.-9.2	<p>Functions/Responsibilities of the Admission Committee</p> <p>The Admission Committee shall arrange for,</p>
Ph.D.-10 Ph.D.-10.1	<ul style="list-style-type: none"> (a) Scrutiny of the applications to determine their eligibility, including those eligible for exemption from the VRAT. (b) Conducting the VRAT and Evaluation. (c) Preparation of the consolidated list(s). (d) Arranging for Pre-Registration Presentations
Ph.D.-10.2	<p>VRAT (VTU Research Aptitude Test)</p> <p>Conduct of VRAT</p> <ul style="list-style-type: none"> (a) All the eligible applicants shall appear for the VRAT, which shall determine the candidate's aptitude for research. The marks obtained by the candidates in the VRAT shall be valid for a period of two years. (b) The candidate shall score 55% marks (50% for SC/ST candidates) in VRAT to get qualified. (c) A candidate can reappear to VRAT examination for indefinite times to get qualified.
Ph.D.-10.3	<p>Exemption from VRAT</p> <p>The following categories of candidates may be exempted from appearing the VRAT with the approval of Admission Committee:</p> <ul style="list-style-type: none"> (a) Faculty Members under QIP / FIP, and (b) Candidates qualified in UGC-CSIR, JRF
	<p>Eligibility for Pre-Registration Presentation</p> <p>The candidates who are successful in the VRAT and all those belonging to the categories listed under Regulation Ph.D.-10.2 shall appear for the pre-registration Presentation.</p>

<p>Ph.D.-10.4</p>	<p>List of the qualified candidates based on cut off marks decided by Admission Committee, shall be called for Pre-registration Presentations before the admission committee.</p> <p>Preparation of Other Lists</p> <p>a) The candidates who have cleared the UGC-CSIR JRF with valid score shall be called for Pre-registration Presentations.</p> <p>b) The faculty members seeking registration under QIP/FIP shall be required to appear for Preregistration Presentations.</p>
<p>Ph.D.-11 Ph.D.-11.1</p>	
	<p>PRE-REGISTRATION PRESENTATION</p> <p>Presentation Performance</p> <p>(a) If the performance of a candidate is not satisfactory at the Pre-Registration presentation conducted, the Admission Committee may give one more chance subsequently to the candidate to appear for the Pre-Registration presentation, provided that his/her eligibility requirements are valid under Regulations Ph.D.10.1 and Ph.D.-10.2.</p>
<p>Ph.D.-12</p>	<p>(b) Admission committee may suggest changes / improvements in Title / Synopsis submitted / presented by the candidate.</p>
<p>Ph.D.-12.1</p>	<p>(c) The candidate failing in the second attempt in presentation shall not be eligible for provisional registration to Ph.D. But such a candidate shall have to appear for VRAT afresh, if required.</p>
	<p>PREPARATION OF LIST OF SUCCESSFUL CANDIDATES FOR PROVISIONAL REGISTRATION</p> <p>Admission Procedure</p> <p>(a) A candidate desirous of upgrading his/her M.Sc. (Engg.) by Research/M.E./M.Tech./M.Arch. registration to Ph. D. Integrated Dual Degree programme, shall submit his/her research proposal to the University before the end of third Semester, which shall be the basis to determine his/her research aptitude by the Admission Committee..</p> <p>(b) Each candidate shall have to seek admission only in such branch of discipline for which the department is recognized as a Research Centre by the University.</p>
<p>Ph.D.-12.2</p>	<p>(c) At this stage, each candidate shall also submit a panel of four domain experts proposed by the Research Guide(s) through the Research Centre for constituting the Doctoral Committee, along with the prescribed fees to the University for provisional Ph.D. registration.</p> <p>(d) In case, any information provided by the candidate is found to be false, the candidate may be debarred from Ph.D. programme at any stage. The Ph. D. Programme</p> <p>(a) Upon receiving the research proposal / outline and the panel of domain experts proposed along</p>

<p>Ph.D.-12.3</p>	<p>with the prescribed fees, the Vice Chancellor shall constitute the Doctoral Committee as per Regulation Ph.D. 3.1.3</p> <p>(b) After provisional registration, the Ph.D. programme of a candidate shall consist of three parts in sequence, namely,</p> <p>Part-I: Coursework, Part-II: Comprehensive Vice Voce, Part-III: Pre-Submission Colloquium Part-IV: Synopsis Submission followed by Thesis Submission and successful Defense.</p> <p>(c) The Coursework for all categories of candidates listed under Regulation 5.2 shall be as prescribed under Regulation 14, except those of the M.E./M. Tech./M. Arch. + Ph.D. Integrated Dual Degree programmes for whom, there shall be no separate requirement for Coursework and such candidates shall be exempted from Part-I.</p> <p>(d) A candidate shall be free to apply for a change in the Research topic /Coursework for the consideration of the Doctoral Committee before the completion of Part-I. But, the candidate shall not be permitted to change the Research topic after the completion of Part-II.</p> <p>(e) All the Ph.D. registrations shall be provisional initially and they shall be confirmed only on the successful completion of both Part-I and Part-II.</p>
<p>Ph.D.-13 Ph.D.-13.1</p>	<p>Role of Doctoral Committee</p> <p>The Doctoral Committee shall scrutinize and approve the Coursework (Part-I), conduct Comprehensive Viva-Voce (Part-II), and review/monitor periodically (at least once in six months) the research progress of each candidate until his/her submission of the Ph.D. Thesis.</p> <p>The Progress report of the candidate shall be signed by the Doctoral Committee and sent to University.</p> <p>CHANGE OF RESEARCH GUIDE</p> <p>Procedure to be Followed</p> <p>a) The request by a candidate for change of Research Guide and/or Co-Guide shall be permitted by the University only under exceptional circumstances, such as disability on health grounds of the Guide and/or Co-Guide and on the endorsement/ recommendation by the Research Centre and the Doctoral Committee.</p> <p>b) In the cases like transfer, retirement or resignation of the Research Guide/Co-Guide before the candidate's submission of the thesis, the Dean shall normally permit the candidate to continue to work under the same Research Guide/Co-Guide or in exceptional cases, permit an alternative arrangement with the consent of the Doctoral Committee.</p>
<p>Ph.D.-14 Ph.D.-14.1</p>	<p>PART-I - COURSEWORK</p> <p>Proposing Coursework</p> <p>(a) For each candidate with Master's degree or equivalent qualification in the Faculty of</p>

	<p>Engineering, Faculty of Architecture, Faculty of Management Studies, Faculty of Science, the candidate shall choose courses from the list of courses announced by the University.</p> <p>(b) Candidate from Engineering / Architecture, MCA and Management Studies stream is required to choose four subjects, out of which one subject namely Research Methodology is compulsory. In the remaining three courses the candidate may choose two courses from the parent stream and may choose one course from any streams relevant to topic of research as recommended by the Guide. The candidate may also choose all three courses from the Parent Stream.</p> <p>(c) In Applied Science, except MCA, a Ph.D. candidate is required to choose six subjects, out of which one subject namely Research Methodology is compulsory. In the remaining five courses the candidate may choose four courses from the parent stream and may choose one course from any stream recommended by the Guide. The candidate may also choose all five courses from the Parent Stream.</p> <p>In addition to the above, candidate seeking to upgrade from M.E./ M.Tech./M.Arch. to Ph.D. under integrated dual degree program shall undertake a course on Research Methodology prescribed by the University.</p>
<p>Ph.D.-14.2 Ph.D.-14.3</p>	<p>Coursework Approval</p> <p>Coursework Lists</p> <p>(a) After getting provisional Ph.D. registration, all the candidates, namely Full-Time, Part-Time and Full-Time (Special) shall take up the coursework recommended by the Doctoral Committee, which shall be a compulsory requirement,</p> <p>(b) All the candidates shall submit their applications along with the prescribed fees for the examinations in the individual courses of Coursework in response to the notifications issued by the University in this respect.</p>
<p>Ph.D.-14.4</p>	<p>Setting up of Question Papers</p> <p>(a) Question papers shall be set by the identified examiners appointed for this purpose by the University from the panel recommended by the Admission Committee.</p> <p>(b) The question paper must be set for maximum marks of 100 and shall have similar format as prescribed for Master's degree of VTU.</p>
<p>Ph.D.-14.5</p>	<p>(c) The question paper setter and answer paper valuator must be a Ph.D. holder.</p>
<p>Ph.D.-14.6</p>	<p>Evaluation of Answer Scripts</p> <p>Answer scripts of all the candidates shall be valued independently by two valuers possessing Ph.D.</p> <p>Averaging of Marks Awarded</p> <p>If the difference between the marks awarded by the two examiners is less than or equal to 14%, the marks awarded to the candidate shall be the average of the two valuations.</p>

Ph.D.-14.7	<p>Appointment of Third Examiner</p> <p>If the difference between the marks awarded by the two examiners is greater than or equal to 15%, a third examiner shall evaluate the concerned answer script(s). The average of the marks of the nearest two valuations shall be considered as the marks secured by the candidate. However, if one of the three evaluations lies exactly midway between the other two, then the higher two marks shall be taken for averaging.</p>
Ph.D.-14.8	<p>Prescribed Passing Standards</p> <p>(a) For passing the Coursework (Part-I), for Ph.D. the candidate shall obtain a minimum of 50% of the marks allotted to each Course in the University Examination.</p> <p>The University shall have the provision to issue Grade Card(s) to the candidates for the Coursework.</p>
Ph.D.-14.9	<p>Norms for Maintaining Provisional Registration</p> <p>The following norms/standards shall be applicable to all the candidates for maintaining their provisional registration:</p> <p>a) A Ph.D./M.Sc.(Engg.)by Research Candidate shall complete the entire coursework within two consecutive years from the date of provisional registration or a maximum of four consecutive coursework examinations shall be conducted by the University from the date of provisional registration of PART-I.</p> <p>b) Candidates failing to fulfill the above requirements are liable to get their provisional registration automatically cancelled and no further extension/coursework examinations will be permissible for completing the coursework. Such candidates are free to apply for provisional registration for Ph.D./M.Sc.(Engg.) afresh.</p>
Ph.D.-15 Ph.D.-15.1	<p>PROGRESS REPORTS / PERIODIC REVIEW BY THE DOCTORAL COMMITTEE</p> <p>The Integrated Dual Degree Programme</p> <p>The procedure to be followed for qualifying for two Degrees under the programme and also for the exit option shall be as follows:</p>
Ph.D.-15.2	<p>Award of Two Degrees</p> <p>Upon successful completion of provisional registration including Part-II (Comprehensive Viva Voce) and Part-III (Synopsis Submission followed by Thesis Submission, and successful Defense), the candidates for the Integrated Dual Degree shall be eligible for receiving two degrees, namely, M.Sc. (Engg.) by Research / M.E./M. Tech. + Ph.D. as the case may be in the Faculty of Engineering or M. Arch. + Ph.D. in the case of Architecture.</p>

Ph.D.-15.2.1	<p>Exit Option</p> <p><i>In case of unsatisfactory progress of research work by a candidate for the Integrated Dual Degree towards Ph.D. award as observed at any stage, the Doctoral Committee shall be free to recommend the candidate to exercise the exit option to get only the M.E./M. Tech. or M. Arch. /M.Sc.(Engg.) Degree, as the case may be. The candidate shall be eligible to earn the Master's Degree at or after the end of fourth semester of normal Master's degree programme, by re-orienting his/her research proposal, conducting additional work if any, on the advice of the Research Guide(s) and preparing/submitting a suitable thesis/ dissertation to the University to meet the requirements of the Masters Degree and then passing in the final oral examination.</i></p> <p>PART-II: COMPREHENSIVE VIVA VOCE</p>
Ph.D.-16	<p>Request for Comprehensive Viva Voce</p>
Ph.D.-16.1	<p><i>The candidate shall submit a written request for the conduct of comprehensive Viva Voce, within six months after successful completion of Coursework (Part-I).</i></p> <p><i>In the case of health / employment related problems of a candidate unable to take the comprehensive Viva Voce as above, the University shall be free to allow a further period of six months for this purpose, on receipt of a written request from the candidate with the recommendations of his/her Research Guide(s) and the Doctoral Committee through the Research Centre.</i></p>
Ph.D.-16.2	<p>Scheduling Comprehensive Viva Voce</p> <p><i>The Research Centre, in consultation with the Doctoral Committee and the University, shall schedule the date/time for the comprehensive Viva Voce preferably within four weeks upon receipt of the written request from the candidate for this.</i></p>
Ph.D.-16.3	<p>Conduct of Viva Voce</p> <p><i>The Doctoral Committee shall conduct the comprehensive Viva Voce in the English language.</i></p> <p><i>The comprehensive Viva Voce shall be a closed-door oral examination consisting of the Doctoral Committee members (as examiners), and the candidate. The Doctoral Committee shall be free to invite additional examiner(s) if need be, chosen from amongst a panel of two experts recommended by the Research Guide for assisting it in the Viva Voce.</i></p>
Ph.D.-16.4	<p>Content and Form of Viva Voce</p> <p><i>The Comprehensive Viva Voce shall consist of a presentation by the candidate on his/her topic of research, including the work done till date and the proposed future work.</i></p> <p><i>The Doctoral Committee (and the additional examiner(s), if present) shall test the candidate for fundamental concepts in the coursework and applied knowledge to carry out the proposed research work.</i></p>
Ph.D.-16.5	<p>Performance Standards at Viva Voce</p> <p><i>The Doctoral Committee shall communicate the result of the Comprehensive Viva Voce to the</i></p>

	<p>University through the Research Centre as:</p> <p>(a) The Committee is satisfied at the successful completion of Viva Voce and the candidate shall continue the research work. OR</p> <p>(b) The Committee indicates the deficiencies in specific areas in which the candidate needs strengthening of knowledge and suggesting a date preferably within the next three months for re-examination.</p> <p>(c) If the Doctoral Committee does not recommend the continuation of research work by the candidate even after the second attempt, the provisional registration of the candidate shall stand cancelled automatically.</p> <p>(d) The committee may suggest refining of thesis title, objectives and orientation.</p>
<p>Ph.D.-17 Ph.D.-17.1</p>	<p>CONFIRMATION OF Ph.D. REGISTRATION</p> <p>Procedural Steps</p>
	<p>After the successful completion of coursework (Part-I) and the Comprehensive Viva Voce (Part-II), the Doctoral Committee shall recommend to the University for issuance of notification to the candidate of Confirmation of Registration.</p>
<p>Ph.D.-17.2</p>	<p>Issue of Notification</p> <p>The University shall issue the necessary notification within fifteen days from the date of receipt of the communication from the Doctoral Committee.</p>
<p>Ph.D.-18 Ph.D.-18.1</p>	<p>OPEN SEMINARS</p> <p>Mandatory Pre-Ph.D. Seminars to be given</p>
	<p>Prior to the submission of Synopsis (required under Part-III), each candidate shall give two pre-Ph.D. presentations, commonly known as, open seminars at the Research Centre, which shall be open to all the faculty members and research scholars, for getting feedback and comments/suggestions from them, for being suitably incorporated into the draft Thesis, under the advice of the Research Guide(s).</p>
<p>Ph.D.-18.2</p>	<p>The Recommendation of Doctor Committee shall be submitted with the Synopsis to the University Pre-Submission Colloquium</p>
<p>Ph.D.-18.3</p>	<p>The candidate shall present a pre-submission colloquium before the Doctoral Committee, demonstrating his/her preparedness to submit the synopsis.</p> <p>Permission for Submission of Thesis</p>
	<p>Considering the research work of the candidate, his / her performance at the pre-submission colloquium and other technical aspects, the Doctoral Committee shall be free to permit the candidate to submit the Thesis.</p>

Ph.D.-18.4	<p>Pre-Submission Colloquium to be Repeated</p> <p>If the Doctoral Committee is not satisfied with the research work of the candidate, it may, in consultation with the Research Guide(s), recommend for improvements, if any. In such a case, the candidate shall appear for pre-submission colloquium once again before the Doctoral Committee within a period of three months to get permission for submission of the Thesis.</p>
Ph.D.-18.5	<p>Anti-plagiarism check and Submission of the Thesis</p> <p>(a) The candidate's thesis shall undergo plagiarism check as per VTU norms.</p> <p>(b) The plagiarism shall be checked by software approved by VTU and percentage of plagiarism (similarity Index) shall be as permitted by VTU owing to software limitation to identify the self-written research papers and definitions and common theory.</p> <p>(c) The candidate may be given two more chances to re-submit the thesis for plagiarism checking by VTU</p> <p>(d) VTU may fix suitable charges to the candidate for plagiarism check at VTU.</p> <p>(e) After getting the clearance from the university in this regard the candidate shall submit six hard copies and one soft copy of the Thesis in the prescribed format based on the research work conducted, to the Research Centre within three months from the date of submission of the Synopsis. The Research Centre shall send five hard copies and one soft copy of the Thesis to the Registrar (Evaluation).</p> <p>In case the candidate is unable to submit his Thesis within three months from the date of submission of the Synopsis, he / she shall be free to seek extension of time from the Vice Chancellor supported by the recommendations of the Research Guide(s) and the Doctoral Committee forwarded through the Research Centre. The candidate shall also pay the prescribed Thesis submission fees, and produce the "No Dues Certificates" from the Research Centre while submitting the Thesis.</p>
Ph.D.-19	<p>PUBLICATION REQUIREMENTS</p>
Ph.D.-19.1	<p>Mandatory Publications requirement</p> <p>Each candidate shall publish a minimum of two research papers in a Refereed Journal based on his/her research work for the Ph.D. Degree, before submission of the Synopsis for adjudication, and produce evidence for the same in the form of reprint or acceptance letter from the Publisher(s) of the Journal.</p>
Ph.D.-20	<p>VALIDITY PERIOD OF REGISTRATION</p>
Ph.D.-20.1	<p>Maintenance of Registration</p> <p>During the period when the registration of the candidate is in force, the candidate shall pay the prescribed tuition and other fees to the University/Research Centre at the notified time intervals.</p>

Ph.D.-20.2	<p>Minimum Period for Submission of Thesis by Full-Time Students</p> <p>Full-Time candidates for the Ph.D. Degree including those upgraded to the M.E./M.Tech./M. Arch. + Ph.D. Integrated Dual Degree programmes, shall be normally eligible for submission of the Thesis after a minimum period of three years from the date of provisional registration, subject to fulfillment of all the prescribed requirements.</p>
Ph.D.-20.3	<p>Minimum Period for Submission of Thesis by Part-Time Students</p> <p>Part -Time candidates for the Ph.D. Degree including those upgraded to the M.E./M. Tech./M. Arch. + Ph.D. Integrated Dual Degree programmes shall be normally eligible for submission of the Thesis after a minimum period of four years from the date of provisional registration, subject to fulfillment of all the prescribed requirements. However, the candidate may be allowed to submit Thesis before four years with recommendation by the Doctoral Committee and with the approval of High Power Committee.</p>
Ph.D.-20.4	<p>Maximum Period for Submission of Thesis by Full-Time Students</p> <p>The maximum period for submission of the Ph.D. Thesis by Full-Time candidates including those upgraded to the M.E./M. Tech./M. Arch. + Ph.D. Integrated Dual Degree programmes, shall be five years from the date of provisional registration. But, the Vice Chancellor shall have the powers to extend the maximum period for submission of the Ph.D. thesis by such a candidate on the specific recommendations of the Doctoral Committee forwarded through the Research Centre on receipt of a request for extension from the candidate not less than three months prior to the completion of the stipulated period. The decision of the Vice Chancellor in this regard shall be final. In the case of failure of the candidate to submit the Thesis even after the extended period, the registration shall be cancelled, after issuing a show-cause notice to the candidate.</p>
Ph.D.-20.5	<p>Maximum Period for Submission of Thesis by Part-Time Students</p> <p>The maximum period for submission of the Thesis for Part-Time candidates shall be six years. But, the Vice Chancellor shall have the powers to extend the maximum period for submission of the Thesis by such a candidate on the specific recommendations of the Doctoral Committee forwarded through the Research Centre on receipt of a request for extension from the candidate not less than six months prior to the completion of the stipulated period. The decision of the Vice Chancellor in this regard shall be final. In the case of failure of the candidate to submit the Thesis even after the extended period, the registration shall be cancelled, after issuing a show-cause notice to the candidate.</p>
Ph.D.-21	
Ph.D.-21.1	<p>SUBMISSION OF SYNOPSIS AND THESIS</p> <p>Eligibility</p> <p>Upon qualifying successfully in the Coursework (Part-I) and the Comprehensive Viva-Voce (Part-II), and satisfactory research progress followed by publication(s) in Refereed Journal(s), the candidate</p>

<p>Ph.D.-21.2</p>	<p>shall be ready to submit the Research report to the Doctoral Committee for recommendation to submit Synopsis to University Synopsis first and subsequently the Thesis, within the validity period.</p> <p>Submission of Synopsis</p> <p>At least three months prior to the submission of the Thesis, the candidate shall submit a Synopsis of the Thesis in English language. The candidate shall submit six hard copies and one soft copy of the Synopsis in the prescribed format to the University through the Research Centre along with:</p> <ul style="list-style-type: none"> (a) Application for adjudication of the Thesis. (b) Certificate from Research Guide(s) stating that (i) Comprehensive Viva-Voce, at least one publication in a Refereed Journal, and all other academic requirements are fulfilled and (ii) There is prima facie case for the submission of the Thesis and the Thesis does not contain any work, which has been previously submitted for the award of any Degree anywhere. (c) Undertaking from the candidate as well as research Guide(s) shall mention that: “The Thesis is based on the individual, original work of the candidate, which is previously unpublished research work”. <p>It shall be ensured by the Research Guide(s) that: The Thesis shall not contain any material that infringes the copyright of any other individual or organization and does not hurt the sentiments of any individual(s) or religion(s). The information such as text, tables, equations, diagrams, figures, charts, graphs, and photographs taken from sources such as published work, like research papers, books, periodicals, Web Sites or other sources has been cited appropriately. Further, the opinions expressed or implied in the Thesis shall be entirely of the candidate.</p> <ul style="list-style-type: none"> (d) Certificate from the Research Centre that there are no arrears of dues up to the date of submission of the Synopsis/Thesis.
<p>Ph.D.-22</p>	
<p>Ph.D.-22.1</p>	<p>ADJUDICATION OF Ph.D. THESIS</p> <p>Panel of Adjudicators</p>
<p>Ph.D.-22.2</p>	<p>The period of three months between the submission of Synopsis and that of the Thesis by the candidate shall be used by the University for deciding the panel of adjudicators.</p> <p>Selection of Adjudicators</p> <p>The Research Centre shall arrange to send Six hard copies and one soft copy of the Synopsis to the Registrar (Evaluation) along with a proposed panel of Twelve experts for adjudication of the thesis as approved by the Doctoral Committee, of whom Six experts shall be from abroad. The complete postal address, e-mail ID, Telephone and fax numbers and the broad area of specialization of each proposed Adjudicator shall be provided along with the panel submitted.</p>

	<p>The Vice Chancellor shall choose two Adjudicators from the suggested panel for adjudication of the Thesis, with at least one being from outside the country, and send invitation letters to them along with a copy of the Synopsis in each case. Their acceptance shall be preferably obtained within three months from the date of invitation, before taking further steps.</p>
Ph.D.-22.3	<p>Appointment of Adjudicators to Evaluate the Thesis The University shall arrange for the Thesis to be evaluated by the Research Guide (and jointly by the Co-Guide, if any) and two more Adjudicators identified as per Regulation 23.2.</p>
Ph.D.-22.4	<p>Dispatch of Copies of Theses to Adjudicators The University shall send a copy of the Thesis to each Adjudicator for evaluation, with a request to evaluate the Thesis and send the Evaluation Report(s) preferably within a period of three months. If the Report is not received from the Adjudicator(s) within this period, a reminder once in a month to that effect shall be sent to the concerned Adjudicator(s). If any Adjudicator does not send the Report even after three reminders or does not reply to the communications from the University, the Vice Chancellor shall be free to identify another Adjudicator either from the panel or outside the panel under special circumstances.</p>
Ph.D.-22.5	<p>Receipt of Thesis Reports at the University All the Adjudicators shall evaluate the Thesis and send their Reports (at least 250 words in length) independently to the Registrar (Evaluation). However, it shall be possible to submit a Joint Report in the case of Research Guide and Co-Guide adjudicating a Thesis. The Reports shall include:</p> <ul style="list-style-type: none"> a) A critical analysis of the work of the candidate as embodied in the Thesis and an evaluation of the work in terms of its contribution to the advancement of knowledge b) List of questions to be asked or points to be clarified if any, at the final Viva Voce. c) A definite recommendation as to whether the Thesis attains the standard for the award of Ph.D. or not. <p>The Adjudicators shall make any one of the following recommendations:</p> <ul style="list-style-type: none"> i. That the Thesis is accepted in the present form and recommended for the award of Ph.D. Degree. OR ii. That the Thesis needs minor clarifications indicated in the Report which need to be clarified by the candidate at final Viva-Voce and it is recommended for the award of Ph.D. Degree. OR iii. That the Thesis needs minor corrections to be made by the candidate as indicated in the Report, which need to be incorporated in the Thesis and clarified at the final Viva Voce and it is recommended for the award of Ph.D. Degree. OR iv. That the Thesis needs major corrections as indicated in the Report and the revised Thesis to be referred back to the Adjudicator for fresh evaluation. OR

	<p>v. That the Thesis is rejected for the reasons specified in the report and not recommended for award of Ph.D. Degree.</p>
Ph.D.-22.6	<p>Consideration of Thesis Reports</p> <p>On receiving favorable recommendations from all the Adjudicators, including the Research Guide(s), the Registrar (Evaluation) shall convey the same to the Research Guide(s) along with copies of the Reports received and request to conduct the final Viva Voce of the candidate.</p>
Ph.D.-22.7	<p>Scheduling of Final Viva Voce</p> <p>The composition of the Board for the final Viva Voce shall be as as specified under Regulation3.1.3.</p> <p>In case, the Identified examiner informs in writing his / her inability to be present at the Viva Voce, the Research Guide (s) shall intimate the same to the Registrar (Evaluation), who shall nominate another examiner from the panel of examiners in consultation with the Vice Chancellor. The date/time of the Viva Voce shall be fixed by the Research Guide(s) in consultation with the other Member(s) of the Board, the Research Centre and the University. The candidate shall provide suitable clarification(s) to all the queries of the Adjudicators at the time of Viva Voce.</p>
Ph.D.-22.8	<p>Rejection of Thesis, based on Negative Reports</p> <p>If both the external Adjudicators (other than the Guide(s)) do not recommend the candidate for the award of the Ph.D. Degree, the Thesis shall be rejected.</p> <p>It shall be open for the candidate to seek registration for this Degree at the University, afresh.</p>
Ph.D.-22.9	<p>Appointment of Additional Adjudicator, if necessary</p> <p>The Thesis shall not be accepted for award of the Degree if any one of the Adjudicators (other than the Research Guide(s)) finds that the research work is not up to the expected standard, as given in his/her Report along with detailed reasons for the same. In such cases, the Report shall be considered by the concerned Doctoral Committee for deciding on the need of appointing an additional Adjudicator. A fourth Adjudicator shall be appointed by the University from the panel, based on this decision, who shall be invited for this purpose, by following Regulation Ph.D. 23.2. If the fourth Adjudicator, after evaluating the Thesis gives a favorable Report, the Registrar (Evaluation) shall initiate further steps as per Regulation Ph.D. 22.5. If the fourth Adjudicator also does not approve the Thesis, then the Thesis shall be rejected.</p> <p>It shall be open for the candidate to seek Ph.D. registration at the University, afresh.</p>
Ph.D.-23	<p>CONDUCT OF FINAL VIVA VOCE</p>
Ph.D.-23.1	<p>Procedure for Final Viva Voce</p> <p>The final Viva Voce shall be conducted by the Viva Voce Board at a Centre approved by the University, which shall, normally be the Research Centre in which the research work was carried out</p>

Ph.D.-23.2	<p>or the Regional Centre of VTU or the institution where the Research Guide/Co-Guide is based.</p> <p>The composition of final Viva Voce Board (as per Regulation Ph.D. 3.1.3) shall be as follows:</p> <ul style="list-style-type: none"> a) Research Guide, -Chairperson b) Co-Guide, if any, -Co-Chairperson c) Adjudicator identified by the Vice Chancellor -Member <p>The procedure for conducting the Viva Voce shall be as follows:</p> <ol style="list-style-type: none"> 1. The Research Guide(s) shall schedule a date/time for the Viva Voce in consultation with the Adjudicator selected by Vice Chancellor, the research Centre and the University and shall inform the date/time to the candidate and the Registrar (Evaluation) in advance. 2. The Research Guide(s) shall invite the Head of the institution, members of the teaching staff and research scholars to attend the Viva Voce. The candidate shall make a brief presentation of the research work carried out highlighting the important findings / conclusions. After the completion of the presentation, the Research Guide(s) shall give opportunity to the invitees to seek clarifications from the candidate. 3. After the presentation, the Board only shall examine the candidate to test his/her understanding of the subject matter of the Thesis and seek answers to the written queries of the Adjudicators in their Thesis Evaluation Reports. The candidate shall be required to produce all the documents, data and analysis in support of the research work presented in the Thesis. 4. On completing the Viva Voce, the Board shall submit a Report to the Registrar (Evaluation) indicating clearly whether the performance of the candidate was satisfactory and if so, giving specific recommendation for the award of the Ph.D. Degree to the candidate. 5. In case the performance of the candidate is not satisfactory, the Board shall report accordingly, giving reasons for the same and recommending another Viva Voce to be conducted after three months. The University shall arrange another Viva Voce as required, with the composition of the Board unchanged. <p>Consolidated Report</p> <p>After successful completion of the Viva Voce, the Viva Voce Board shall prepare and forward the Consolidated Report along with duly corrected version of both the hard and the soft copies of the Thesis through the Research Centre to the University. Then the University with the approval of its Authorities shall award the Ph.D. Degree to the Candidate.</p> <p>The Vice Chancellor shall have the powers to constitute an Expert Committee to investigate into plagiarism issues connected with the Thesis, in the case of receipt by the University of any complaints either from the adjudicator(s), other individuals or any other sources. In the event of a Thesis being proved to be copied, plagiarized or misrepresented academically, the University shall have the powers to rescind the degree.</p>
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Ph.D.-23.3	<p>Handling of Plagiarism Issues</p> <p>The Vice Chancellor shall have the powers to constitute Expert Committees to investigate into plagiarism issues connected with any Ph.D. Thesis submitted to the University, in the case of receipt of any complaints either from the Adjudicator(s), other individuals or any other sources. In the event of a Thesis being proved to be copied, plagiarized or misrepresented academically, the University shall have the powers to rescind the Degree. Such candidates shall not be eligible for registering for any Degree programme at the University in the future.</p>
Ph.D.-24	<p>AWARD OF Ph. D. DEGREE</p>
Ph.D.-24.1	<p>Degree Certificates</p>
Ph.D.-24.1	<p>Upon the approval by the Executive Council, the University shall issue a Provisional Ph.D. Degree Certificate to the candidate certifying that the Degree has been awarded in accordance with the “VTU Regulations Governing the Degree of Doctor of Philosophy (Ph.D.) – 2014”. The University shall award the Ph.D. Degree Certificate during the forthcoming Convocation. In the case of candidates for the Integrated Dual Degrees, each one shall be entitled to receive the M.Sc.(Engg.) by research, M.E./M. Tech. or the M. Arch. Degree as the case may be, along with his/her Ph. D. Degree.</p> <p>University shall hold the copyright of the Thesis submitted to it.</p>
Ph.D.-24.2	<p>DEPOSITORY WITH UGC AND THE UNIVERSITY</p>
Ph.D.-25	<p>Submission to UGC</p>
Ph.D.-25.1	<p>Following the successful completion of the evaluation process and announcement of the award of the Ph.D. Degree, the University shall submit a soft copy of the Ph.D. Thesis to the UGC within a period of thirty days, for hosting the same on its Information and Library Network (abbreviated as INFLIBNET), accessible to all the Institutions / Universities. The University shall also maintain a repository of such Ph.D. Theses in its Library.</p>
Ph.D.-26	<p>PROHIBITIONS</p>
Ph.D.-26.1	<p>Prohibition of Statutory Officers from Ph. D. Registration</p>
Ph.D.-26.1	<p>The Statutory Officers of the University shall not be permitted to register for the Ph.D. Degree of the University during the period of their tenure at the University.</p>
Ph.D.-26.2	<p>Prohibition of Candidates from Registering for any other Degree</p>
Ph.D.-26.2	<p>No Ph.D. candidate of the University shall be permitted to pursue any other Degree programme within the University or at other Universities / Institutions, concurrently with his/her on-going registration as a candidate for the Ph.D. Degree.</p>

<p>Ph.D.-27</p>	<p>REPEAL AND SAVINGS</p>
<p>Ph.D.-27.1</p>	<p><i>Notwithstanding anything contained in these Regulations, the provisions of any guidelines, orders, rules or regulations in force at the University shall be inapplicable to the extent of their inconsistency with these Regulations.</i></p>
<p>Ph.D.-27.2</p>	<p><i>The University shall issue such orders/instructions, and prescribe such format/procedure, as it may deem fit to implement the provisions of these Regulations</i></p>
<p>Ph.D.-28</p>	<p>INTERPRETATION</p>
<p>Ph.D.-28.1</p>	<p><i>Any question as to the interpretation of these Regulations shall be decided by the University, whose decision shall be final. The University shall have the powers to issue clarifications to remove any doubt, difficulty or anomaly which may arise during the implementation of the provisions of these Regulations.</i></p>

GUIDELINES FOR THE PREPARATION OF PH.D/M.Sc.(Engg.) THESIS

1. Reports should be typed neatly on one side of the paper with 1.5 spacing on a A4 size bond paper (210x297mm). The margins should be: Left – 1.25”, Right – 1”, Top and Bottom 0.75”.
2. The total number of reports to be prepared are
 - a) Four copies to be submitted to the Registrar (Evaluation).
 - b) One copy to the department
 - c) One copy to the concerned guide(s)
 - d) One copy to the candidate.
3. Before taking the final printout, the approval of the concerned guide(s) is mandatory and suggested corrections. If any, must be incorporated.
4. For making copies dry tone Xerox is suggested.
5. Every copy of the report must contain
 - a) Inner title page(White)
 - b) Outer title page with a plastic cover
 - c) Certificate in the format enclosed.
 - d) The thesis must be forwarded through the principal /HOD/ Head of the Organization where work is carried out.
 - e) An abstract (synopsis) not exceeding 1000 words, indicating salient features of the work
6. The organization of the report should be as follows
 - Inner title page
 - Abstract or synopsis
 - Acknowledgments
 - Table of contents
 - List of table & figures (optional)

} Usually numbered in roman

 - Chapters (to be numbered in Arabic) containing Introduction- which usually specifies the scope of work and its importance and relation to previous work and the present developments, Main body of the report divided appropriately into chapters, sections and subsections. A tentative division is as given below.
 - The chapters, sections and subsections may be numbered in the decimal form for e.g. Chapter, 2, sections as 2.1, 2.2 etc., and subsections as 2.23, 2.5.1 etc.
 - The chapter must be left justified (font size 16). Followed by the title of chapter centered (font size 18), section/subsection numbers along with their heading must be left justified with section number and its heading in font size 16 and subsection and its heading in font size 14. The body or the text of the report should have font size 12.
 - The **figures** and **tables** must be numbered chapter wise for e.g:Fig 2.1 Block diagram of a serial

- *inary adder, Table 3.1 primitive flow table. Etc. All figures and tables should appear either in the same page or the next page in which they are referred first. Preferably, all figures and tables are to be placed either at the top or the bottom of a given page.*
- *The **last chapter** should contain the summary of the work carried, contributions if any, their utility along with the scope for further work.*
- **Reference:** *The references should be numbered serially in the order of their occurrence in the text and their numbers should be indicated within square brackets for e.g (3). The section on references should list them in serial order in the following format.*
 - a) *For textbooks-A.V. Oppenheim and R.W. Schafer, Digital signal processing, Englewood, N.J., Prentice Hall, 3 Edition, 1975*
 - b) *For papers- Devid, Insulation design to combat pollution problem, Proc of IEEE, PAS, Vol 71, Aug 1981 , pp 1901-1907*
- *One **SI units** are to be used in the report. Important equations must be numbered in decimal form for e.g.*
- $V=IZ$ (3.2)
- *All equation numbers should be right justified.*
- *The **report** should be extensive and include descriptions of work carried out by others only to the best extent necessary. Verbatim reproduction of material available elsewhere should be **strictly** avoided. Where short excerpts from published work are desired to be included, they should be within quotation marks appropriately referenced.*
- *Proper attention is to be paid not only to the technical contents but also to the organization of the report and clarity of the expression. Due care should be taken to avoid spelling and typing errors. The student should note that report-write-up forms the importa component in the overall evaluation of the project.*
- *Hardware work must include: the component layout complete circuit with the component list containing the name of the component, numbers used, etc. and the main component data sheets as Appendix.*
- *Software work must include a virus free disc, containing the software development by them along with the readme file. Readme file should contain the details of the variables used, salient features of the software and procedure of using them: compiling procedure details of the computer hardware/software requirements to run the same, etc. If the developed software uses*

any public domain software downloaded from some site, then the address of the site along with the module name etc. must be included on a separate sheet. It must be properly acknowledged in the acknowledgments.

- *The thesis submitted to the departments/guide(s) must be hard bounded, with a plastic covering.*
- *The thesis may be composed in Latex/Tex/ Word format.*

KARPAGAM UNIVERSITY
COIMBATORE – 641 021

***Draft Regulations for
D.Sc. / D.Litt. Programmes***

**REGULATIONS EFFECTIVE FROM
*January 2013***

KARPAGAM UNIVERSITY

(Established Under Section 3 of UGC Act, 1956)

COIMBATORE – 641 021

Draft Regulations for D.Sc. and D.Litt. Programmes

REGULATIONS EFFECTIVE FROM JANUARY 2013

PREAMBLE

Higher Doctorates are a measure of the prestige of a university. They indicate that the recipient has made a substantial contribution to their subject, and that they are recognised by their peers as scholars of distinction. The award of a Higher Doctorate is almost entirely based on external examiners' recommendations, and so represents an independent measure of prestige. More specifically, Higher Doctorates can be used as a measure of excellence in the Research Assessment Exercise.

The award of Higher Doctorates to any qualified person contributes to the achievement of the strategic goal "Increase the quality and quantity of research", so all eligible individual who may have the potential to qualify for these awards should give serious thought to making an application. From a personal perspective, this is a means by which successful researchers and scholars can acquire a significant qualification and also reflect on their achievements and future ambitions. Karpagam University Coimbatore encourages applications, and will arrange for advice to candidates from University / Affiliated Colleges / Educational Institutions / R&D Establishments / Approved Research Centres / Industries.

Further and more specific advice is available from the University Office / Collaborative Research Organisations / Approved Research Centres.

The higher doctorates to be awarded by the University are:

- Doctor of Science (D.Sc.)
- Doctor of Letters (D.Litt.)

1. ELIGIBILITY

A Doctor of Philosophy (Ph.D.) of this University or a candidate who has qualified for the Ph.D. degree or for any other Degree recognised as equivalent thereto from any other University approved by competent authorities / statutory bodies of Government of India / UGC / AIU may present himself/ herself for the degree of Doctor of Science (D.Sc.) / Doctor of Letters (D.Litt.) the highest degrees of this University in the faculties of Humanities & Science, Education, Computer Applications, Management, Engineering and Technology/Inter disciplinary, provided that

- 1.1 he/she has been doing post-doctoral work for more than 3 years in the Department of this University or other University/Institutions (approved by competent authorities / statutory bodies of Government of India / UGC / AIU)/ Industry / an institution recognised for this purpose / Approved Research Centre / independently at their place of work concurrently with their regular profession and
- 1.2 the publications or thesis submitted by him/her for consideration for the award of D.Sc/D.Litt are substantially the result of post-doctoral research work done.

2. APPLICATION AND THESIS

The candidate shall state in his/her application (Vide, Appendix I) the special subject upon knowledge on which he/she bases his/her qualification for the Doctorate. Such subject shall be one, which relates to the branch of knowledge chosen for the preliminary Degree and/or related to his/her profession/ service. If the thesis submitted has formed in part the basis for the award of a previous research Degree, the candidate shall clearly set forth in a preface or written statement, the portion or portions upon which was the basis for the award of the previous degree. He/she shall submit with this application five copies of his/her thesis, which shall ordinarily

be published work or published papers or books or a fresh thesis, that make a distinct contribution to scientific knowledge / epistemology.

A thesis must be on a particular theme. However, a series of connected papers can be submitted provided they from one connected theme; and additional papers can be submitted in support of the main thesis only on the understanding that the candidate indicates in the preface the main work, or memoir or thesis upon which he/she bases his/her application.

2.1 The work submitted should be of high distinction

The submission may take the form of thesis/books, contributions to Journals/Conferences etc., but clear arguments must be put forward to substantiate the claim of work of high distinction with knowledge content. Other indicators include personal citations in feedback, invited keynote addresses at International Conferences / Seminars / Workshops, Editorial Appointments, Appointment as Examiners of Ph.D. Thesis, high-level Advisors, Prizes, Decorations, Involvement with Professional Bodies, R&D Organisations, Research Projects and so on.

Note : It is recommended that identifying the evidence for this criterion should be one of the first tasks in preparing a submission, because this will guide the selection of the material to be submitted and the subsequent argument and justification.

2.2 Should constitute an original and significant contribution to the advancement of knowledge

This is of course closely inter-related with the previous requirement, but is more concerned with the impact and influence of the applicant's work on the academic subject. Extensive citations and positive discussion of the work in refereed journals would be prime evidence, as would adoption of research in codes of practice and other evidence of significant external recognition.

Note : this requirement can be met through supervision of research as well as by personal research and scholarship, although this requires careful and objective explanation.

The applicant can also include a full and relevant CV, and to provide a succinct commentary of the achievements and professional references.

Retired members of staff or from R&D Establishments / Affiliated Colleges of this University / Educational Institutions / Approved Research Centre / Industries may also apply for Higher Doctorates. It is recommended that a brief statement of the applicant's future plans and expected achievements should also be included in the submission.

2.3 Higher Doctorates – The Basic Process and its Stages – A Roadmap

2.3.1 The Process:

- a. Submitting the Application (Vide, Appendix I)
- b. Submitting the Thesis and / or along with Journal / Conference Publications and submit consolidated report / thesis, if it is ready immediately or within one year
- c. Application along with consolidated report / thesis sent to three external examiners or referees selected from the panel of FIVE Examiners
- d. If the panel agrees with clear majority of unambiguous support – then the candidate is successful
- e. The award will be confirmed at the annual ceremony / special convocation.

2.3.2 Applicants must be one of:

a. Candidates from Science / Engineering / Technology Streams for D.Sc:

Any PG Degree in Science / Engineering / Technology / Management / equivalent Degree approved by UGC / AIU, along with Ph.D. and three years of Post Doctoral research work after PhD / publications after Ph.D.

b. Candidates from Humanities and Education Streams for D.Litt :

Any PG Degree in Humanities / Education / equivalent Degree approved by UGC / AIU, along with Ph.D. and three years of Post Doctoral research work after PhD / publications after Ph.D.

Note : Which Award to apply for:

- **D.Sc.:** Science / Engineering / Technology / Management Stream
- **D.Litt.:** Humanities / Education Stream

2.3.3 Work of the Candidates must provide evidence of :

a. High Distinction

b. Original & significant contribution to the advancement or application of knowledge (or both).

2.3.4 What to submit:

a. A foreword

b. Post Doctoral work of the Candidate / Thesis

c. Statements, as appropriate, on joint authorship - This establishes the candidate's proportion of the publication, or the originality of their contribution and its place in the thread of the candidate's application.

Work of the Candidate could include:

d. Books, journal contributions

e. Patents, reports

f. Specifications, design studies

g. Other relevant evidence of original work

h. Contributions / Achievements towards the field of specialisation / research

Note : Citations - Could be described in the Foreword.

2.3.5 Foreword:

a. Candidate's view of the nature and significance of his / her work

b. Up to 5000 words highlighting the significance and originality of the work.

2.3.6 Presentation:

a. In one, or more, hard bound folder(s) – with title and contents page in each

b. Books, if any published

c. Five copies of the Thesis / consolidated report

The title page of the Thesis cover format etc., should strictly conform in presentation as prescribed and the thesis (all five copies) should carry a declaration by the candidate (Vide, Appendices II & III)

d. Preface and Notes

The candidate shall indicate generally, in a preface to his/her thesis and specially in notes, the sources from which his/her information is taken and the extent to which he/she has availed himself/herself of the work of others; he/she also state in what respect his/her investigation appear to him /her to tend to the advancement of knowledge or otherwise form a valuable contribution to the literature of the subject dealt with.

e. Additional Papers

The candidate may with the thesis forward printed copies of any original contribution or contributions to the knowledge of his/her subject or any cognate subject which may have been published by him/her independently or conjointly and upon which he/she realize in support of his/her candidature.

2.3.7 Key Issues to be Addressed:

- a. Co-authorship of publication – need to identify the candidates contribution to submitted papers
- b. Scientific contribution in general work – need to record and detail scientific work for committees and working groups etc. Such proceedings could assist the case for award and keynote addresses etc. would have greatest weight.
- c. There is a need to be imaginative in the creation of the award application although its core will be work published in learned / refereed journals.
- d. Define your significant impact on scientific knowledge.
- e. Do not be modest in your impact statement.
- f. Quote appointment by other Universities as their Member in Board of Management / Senate / Academic Council / Research Board / Doctoral / Research Committee / Examiner to Evaluate Ph.D. Thesis etc.
- g. Quote journal / conference refereeing / editorial assignments / activities.
- h. A submission can have an overarching theme but may break into sections, which make up this overarching theme.
- i. Include a summary of published outputs describing their nature.
- j. Potential applicants may wish to consider the use of a 'mentor' to guide them through the process and advise them on best practice.

As a general Rule – If in doubt as to whether to include an item - include it.

2.3.8 After Application:

The Thesis will be evaluated as per the Regulation 5.

3. DECLARATION

The thesis shall be accompanied by the declaration (Vide, Appendix III) signed by the candidate that it has been composed by him / her independently, and a certificate that the thesis has not previously formed the basis for the award of any degree such as a Master Degree or Ph.D. degree, Diploma, Associateship, Fellowship or other similar title in this or any other University / Institute of Higher Learning.

4. DATE OF SUBMISSION OF THE APPLICATION AND THESIS

The application and thesis must be forwarded with the prescribed Registration and Processing fee of Rs. 10,000/- (For NRI / Foreign Nationals USD 1000) to The Director - Research at any time of the year.

In addition to that an Evaluation Fee of Rs. 15,000/- (For NRI/ Foreign Nationals USD 1500) to be paid after the scrutiny of application and its acceptance.

5. EVALUATION OF THESIS

The thesis, together with any contribution and papers submitted shall be referred by the Sub-committee formed for the purpose/Board of Research, for report, to a board of three examiners/referees, the candidate may be asked to submit to oral examination (If necessary); provided, however, it shall be competent for the Sub-committee formed for the purpose/Board of Research, in the case of board of examiners outside India, to arrange for holding of oral examination by a board of examiners in India.

The viva-voce board will comprise any one of the External Examiner (as decided by the VC) and two other members of the faculty as approved by the VC of the University. After receipt from the board or boards of the report on the thesis and on the oral examination, if any, the Sub-committee formed for the purpose/Board of Research may decide whether the candidate has qualified for the degree or not.

Examiners must provide a clear majority of unambiguous support. If this is not forthcoming various options exist which will be discussed with the candidate in confidence: These include:

- (i) Re-draft the application
- (ii) Resubmit when more or better work available

The Board of Examiners shall report on the merit of the candidate as “Commended” or “Not Commended” on the prescribed form or format to be received by the examiner along with a copy of the Thesis (Vide, Appendix IV).

The decision of the Sub-committee formed for the purpose/Board of Research shall be approved / ratified by Board of Management and then shall be published in Tamil Nadu Government Gazette.

5.1 Approved Thesis after Evaluation

If the candidate passes the viva-voce examination, (if decided by the Examiner(s)) he/she shall carry out, corrections to the thesis if such suggestions have come either from the thesis examiners or from the viva voce board. Only then, he/she shall become eligible for the award of the degree. Such a certification on corrections is the responsibility of the Director – Research, who will forward the corrected thesis to the examination wing of the University.

5.2 Format of Degree Certificate

The D.Sc. / D.Litt. degree certificate shall incorporate the title of the thesis along with the name(s) of the faculty/faculties and discipline(s) or interdisciplinary / multidisciplinary [Vide, Appendix V].

5.3 Publication of the Thesis

An approved thesis may be published with a permission of the University, provided that a candidate may during the course of his/her post doctoral research, publish papers in standard research journals/conferences, as desired by the candidate.

6. NUMBER OF CHANCES

A Candidate shall not be permitted to submit a thesis for the degree on more than two occasions, however, based on the consideration of the remarks of the board of the examiners to permit a candidate to submit a thesis on second occasion not early than six months.

7. REMOVAL OF DIFFICULTIES

Notwithstanding anything in the above document, the Vice-Chancellor may take such measures as may be necessary in respect of candidates registered with the University. The University reserves the right to change the rules from time to time and only the latest rules will be applicable to all the candidates irrespective of the year of registration.

APPENDIX I
[REF : REGULATIONS : 2 & 2.3.1]

KARPAGAM UNIVERSITY
(Established Under Section 3 of UGC Act, 1956)
COIMBATORE – 641 021

APPLICATION FORM FOR ADMISSION TO D.Sc. / D.Litt. PROGRAMME

1. Name (in **Block Letters**) :

2. Designation/Official Address :

.....

.....



Date of Birth :

Nationality :

Mobile / Phone No. & E-Mail :

3. Qualifications : Name of the University Year

UG Degree :

PG Degree :

M.Phil. / Other Degree :

Ph.D. Degree :

Month and Year of Award of Ph.D. Degree :

Title of the Ph.D. Thesis :

4. Area of Specialization

5. i) Academic Experience (No. of Years)

(a) As Lecturer : (From To)

(b) As Assistant Professor : (From To)

(c) As Professor : (From To)

(d) Total Teaching Experience :

ii) Industrial Experience : (From To)

(Attach Separate Sheet if necessary)

(a) Total Industrial Experience :

Note : Attach a detailed CV of the Applicant

6. Membership in Professional Societies :
(Attach Separate Sheet if necessary)

7. Number / Value in Rs. of Sponsored Research Projects :
(as Principal / Co-Investigator give details separately)
(Attach Separate Sheet if necessary)

8. Are you an approved Supervisor for :
Ph.D. Programme of this / any other
University/Universities?

9. Research Guidance (No. of Thesis guided)

(a) Master's / M.Phil. Thesis :

(b) Ph.D. Thesis :

10. Examiner for Ph.D. Thesis :

(a) Number of the Thesis Evaluated :

(b) Name of the University / Universities :

11. Are you appointed as Doctoral / Research Committee Member of :
Ph.D. / M.S. (By Research) / M.Sc. (Engineering) / M.Tech. (By Research)
programme of any other University / Universities?
(Attach Separate Sheet if necessary)

12. Are you a Member of any Editorial Board(s) / Referee Panel if any :
Journal / Conference Proceedings?
(Attach Separate Sheet if necessary)

13. The number of Summer / Winter Schools conducted / attended :
(Attach Separate Sheet if necessary)

14. The number of Invited Talks / Keynote Addresses delivered :
(Attach Separate Sheet if necessary)

15. The number of Industrial Expos/Conferences/Symposium/attended :
(Attach Separate Sheet if necessary)

16. The number of Professional visits to Foreign Countries :
(Attach Separate Sheet if necessary)

17. The number / worth (Value in Rs. of Industrial / Consultancy :
Projects executed / handled **(Attach Separate Sheet if necessary)**

18. Publications (Please attach list of publications and reprints of at least two publications published during last 3 years in National/International Journals/Refereed Conference Proceedings) **(Attach Separate Sheet / Copies of Publications / Books / Course Materials / Details of Patent(s) etc. if necessary)**

(a) Number of Papers in Refereed Journals

- i) National Journals :
- ii) International Journals :
- (b) Number of Papers published in Refereed Conference Proceedings :
- (c) Number of Books / Course Materials Published :
- (d) Number of Patent(s) filed / obtained :

19. Any other Achievements / Honours / Awards / Information would you like to furnish here? **(Attach Separate Sheet if necessary)**

20. Foreword / abstract / synopsis highlighting the post doctoral work of the candidate and/or consolidated report / Thesis (if it is ready at the time of submitting application)

(a) Details of Processing Fee of Rs. 10,000/- (for NRI / Foreign Nationals USD 1000) by the way of DD in favour of "Director – Research, Karpagam University Coimbatore", payable at "Coimbatore".

Amount in Rs. DD No. Bank Date

- (b) Proposed Title of the Thesis for the D.Sc./D.Litt. Degree
- (c) Area of Research for the D.Sc./D.Litt. Degree

DECLARATION

I, declare hereby that the thesis or memoir of work has been composed by myself and has not previously formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or other similar title.

Date:

Place:

Signature of the Applicant

Encl.: List of Publications / Reprints / Books / Details of Patent(s) filed or obtained.
Other Relevant Annexure(s) / CV / Information & Xerox copy of
Ph.D. Degree Certificate

FOR OFFICE USE

APPENDIX II
[REF: REGULATIONS : 2.3.6]

Format of D.Sc / D.Litt Title Page of Thesis

TITLE OF THE THESIS

A Thesis
Submitted by

Name of the Candidate

In fulfillment of the degree
of
DOCTOR OF SCIENCE
or (Doctor of Letters)

in
MECHANICAL ENGINEERING
(Relevant Department)

Under the
Faculty of Engineering/Technology
(Relevant Faculty)

LOGO OF
UNIVERSITY

KARPAGAM UNIVERSITY
COIMBATORE – 641 021

MONTH AND YEAR OF SUBMISSION

APPENDIX III
[REF: REGULATIONS : 2.3.6 & 3]

DECLARATION

I declare that the thesis entitled _____

submitted by me for the degree of Doctor of Science/ Doctor of Letters is the record of work carried out by me during the period from _____ to _____ and has not formed the basis for the award of any degree, diploma, associateship, fellowship, titles in this or any other University or other similar institution of Higher Learning.

Signature of the Candidate

APPENDIX IV
[REF: REGULATIONS : 5]

PROFORMA FOR ADJUDICATION OF THE D.Sc. / D.Litt. THESIS

1. Name of the Candidate :
2. Title of the Thesis :
3. Discipline and Subject :
4. Name & Address of the Examiner :
5. Recommendation of the Examiner :
[Please strike out whichever are NOT applicable]
- a) Thesis is Commended OR
- b) Thesis is Commended and Degree may be awarded subject to the candidate furnishing satisfactory clarification to my queries during the Viva-Voce Examination.
- c) Thesis is Commended and Degree may be awarded subject to the condition that the corrections/modifications suggested by me are carried out in the thesis and duly certified by the Director - Research before the Viva-Voce Examination.
- OR
- d) Thesis is Not Commended and the Degree may not be awarded

NOTE :

Please enclose your detailed report on the thesis. Please also enclose a list of questions, if any, to be asked at the Viva-Voce Examination.

6. Any other remarks (if any) :

Place :

Date :

.....

[Signature of the Examiner]
with Designation

Address :

APPENDIX V
[REF: REGULATIONS : 5.2]

FORMAT OF DEGREE CERTIFICATE

KARPAGAM UNIVERSITY
(Established Under Section 3 of UGC Act, 1956)
COIMBATORE – 641 021

Faculty of _____

the Board of Management of Karpagam University hereby makes known that (Name of the candidate) has been admitted to the Degree of Doctor of Science / Doctor of Letters, he/she having been certified by duly appointed examiners to be qualified to receive the same in the year _____ for the thesis entitled

(Title of the Thesis)

(Name of the Discipline)

Given under the seal of Karpagam University this _____ day of _____

Registrar

Vice-Chancellor

COMMON FOR MANY OF THE INDIAN UNIVERSITIES

A MANUAL FOR PREPARATION OF THESIS

1. GENERAL:

The manual is intended to provide broad guidelines to the M.E./M.Sc./M.Tech/M.C.A./ M.B.A./ M.Phil/M.Tech (By Research)/Ph.D. candidates in the preparation of the thesis. In general, the thesis shall report, in an organised and scholarly fashion an account of original research work of the candidate leading to the discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware oriented etc.) In the case of Ph.D. thesis it shall demonstrate a quality as to make a definitive contribution to the advancement of knowledge and the candidate's ability to undertake sustained research and present the finding in an appropriate manner.

2. NUMBER OF COPIES TO BE SUBMITTED:

M.Tech (By Research)/
Ph.D. Thesis : Five copies are to be submitted to the University one for each of University, Central Library, Department Library, Internal Examiner and External Examiner.

M.E./M.Tech./M .Sc./MBA/MCA : Three copies are to be submitted to the Dean/Director through the respective Heads of Departments one for each Departmental Library, Internal Examiner and External Examiner.

3. SIZE OF THESIS:

The size of thesis should not exceed 300 pages of typed matter reckoned from the first page of Chapter I to the last page of the Appendix for PhD and 80 pages for Master's Thesis.

4. ARRANGEMENT OF CONTENTS OF THESIS:

The sequence in which the thesis material should be arranged and bound should be as follows;

1. Title page
2. Bonafide Certificate
3. Abstract
4. Acknowledgement
5. Table of Contents
6. List of Tables
7. List of Figures
8. List of Symbols, Abbreviations or Nomenclature (Optional)
9. Chapters
10. Appendices
11. References
12. Vitae (for Ph.D. Thesis only)

The Tables and Figures shall be introduced in the appropriate places.

5. PAGE DIMENSIONS AND MARGIN:

The dimensions at final bound 5 copies of the thesis report should be 290mm x 205mm. Standard A4 size (297mm x 210 mm) paper may be used for preparing the copies.

The final thesis 5 copies (at the time of submission) should have the following page margins:

Top edge : 30 to 35 mm

Bottom edge : 25 to 30 mm

Left side : 35 to 40 mm

Right side : 20 to 25 mm

The thesis should be prepared on good quality white paper preferably not lower than 80 gsm/ Sq . Meter.

Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

Two copies of thesis after viva voce should be reduced to A5 size with printing on both sides.

6. MANUSCRIPT PREPARATION:

The candidate shall supply a typed copy of the manuscript to the guide for the purpose of approval. In the preparation of the manuscript, care should be taken to ensure that all textual matter is typewritten to the extent possible in the same format as may be required for the final thesis.

Hence some of the information required for the final typing of the thesis is included also in this section.

The headings of all items 2 to 12 listed in section 4 should be typed in capital letters without punctuation and centred 50mm below the top of the page. The text should commence 4 spaces below this heading. The page numbering for all items 1 to 8 should be done using lower case Roman numerals and the pages thereafter should be numbered using Arabic numerals.

6.1 Title Page - A specimen copy of the title page for Ph.D. M.Tech (By Research)/M.Phil and M.E./M.Tech. thesis are given in Appendix 1 and Appendix 2 respectively.

6.2 Bonafide Certificate - Using double spacing for typing the Bonafide Certificate should be in this format :

Certified that this thesis titled..... is the bonafide work of Mr./Ms..... who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation of the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

In the case of Master's Degree, the certificate to be countersigned by the HOD.

6.3 Abstract - Abstract should be an essay type of narrative not exceeding 600 words, outlining the problem, the methodology used for tackling it and a summary of the findings.

6.4 Acknowledgement - It should be brief and should not exceed one page when typed double spacing.

6.5 Table of Contents - The table of contents should list all material following it as well as any material which precedes it. The title page, Bonafide Certificate and Acknowledgement will not find a place among the items listed in the Table of Contents but the page numbers of which are in lower case Roman letters. One and a half spacing should be adopted for typing the matter under this head.

6.6 List of Table - The list should use exactly the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head.

6.7 List of Figures - The list should use exactly the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head.

6.8 List of Symbols, Abbreviations and Nomenclature - One and a half spacing should be adopted for typing the matter under this head. Standard symbols, abbreviations etc. should be used.

6.9 Chapters - The Chapters may be broadly divided into 3 parts (i) Introductory Chapter, (ii) Chapters developing the main theme of the thesis, (iii) Results, Discussion and Conclusion.

The main text will be divided into several chapters and each chapter may be further divided into several divisions and sub division.

- Each chapter should be given an appropriate title.
- Tables and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
- Footnotes should be used sparingly. They should be typed single space and placed directly underneath in the very same page which refers to the material they annotate.

6.10 Appendices - Appendices are provided to give supplementary information, which if included in the main text may serve as a distraction and cloud the central theme under discussion.

- Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc.
- Appendices, Tables and References appearing in appendices should be numbered and referred to at appropriate places just as in the case of chapters.

6.11 List of References - Any works of other researchers are used either directly or indirectly the origin of the material thus referred to at appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate place of reference. The citation may assume any one of the following forms.

Examples of Citation

- An improved algorithm has been adopted in literature (Natarajan 1990)
- Jhon and Mckay (1999) have dealt at length this principle.
- The problem of mechanical manipulators has been studied by Shin et al (1984) and certain limitations of the method used, has been pointed out by Shin et. al. (1984 a).
- The listing should be typed 4 spaces below the heading "REFERENCES" in alphabetical order in single spacing left justified. The reference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the year and other details. A typical illustrative list given below relates to the citation example quoted above.

REFERENCES

1. Radhakrishnan .R and Balasubramanian .S (2008), "Business Process Reengineering, Text and Cases", Prentice-Hall of India Private Ltd., New Delhi.
2. Kannadasan .T and Gopalakrishnan .K (2009), "Issues and Challenges of Academic Research in India", Manufacturing Technology and Management, Journal of IIPE, Vol.3, No.2, pp.131-138.
3. Devadasan .S.R., et. al. (2007), "Study of Various Quality Models in Engineering Educational Institutions", Proceedings of the International Conference : TEAM TECH 2007, IISc, Bangalore, India, October 4-6, pp.115-122.
4. Sivanandan .S.N and Deepa S.N (2005), "A Novel Approach for Inferring Instability using Routh Column Polynomials, Advances in Modeling C", AMSE Press, France, Vol.60, No.6, pp.25-36.

6.12 Tables and Figures - By the word Table, is meant tabulated numerical data in the body of the thesis

as well as in the appendices. All other non verbal material used in the body of the thesis and appendices such as charts, graphs, maps, photographs and diagrams may be designated as figures.

- A table or figure including caption should be accommodated within the prescribed margin limits and appear on the page/following the page where their first reference is made.
- Tables and figures on half page or less in length may appear on the same page along with the text. However, they should be separated from the text both above and below by triple spacing.
- All tables and figures should be prepared on the same paper or material used for the preparation of the rest of the thesis.
- For preparing captions, numerals, symbols or characters in the case of tables or figures, the computer should be used.
- Two or more small tables or figures may be grouped if necessary in a single page.
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- Photographs if any should be included in the colour Xerox form only. More than one photograph can be included in a page.
- Samples of Fabric, Leather, etc., if absolutely necessary may be attached evenly in a page and fixed/pasted suitably and should be treated as figures.

7. TYPING INSTRUCTIONS:

7.1 General

This section includes additional information for final typing of the thesis. Some information given earlier under 'Manuscript preparation' shall also be referred.

The impressions on the typed/duplicated/printed copies should be black in colour.

If Computer printers are used uniformity of the font in the same thesis shall be observed.

Certain symbols, characters or markings not found on a standard typewriter may be hand written using Indian Ink or a Stylus pen (in case stencil sheets are used). Corrections, interlineations and crossing out of letters or words will not be permitted in any of the copies of the thesis intended for submission. Erasures, if made, should be neatly carried out in all copies.

A sub-heading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page.

The last word of any page should not be split using a hyphen. One and a half spacing should be used for typing the general text Single spacing should be used for typing:

- i) Long Tables
- ii) Long quotations
- iii) Foot notes
- iv) Multiline captions
- v) References

All quotations exceeding one line should be typed in an indented space the indentation being 15mm from either margin.

Double spacing should be used for typing the Bonafide Certificate and Acknowledgement.

7.2 Chapters

The format for typing chapter headings, divisions headings and sub division headings are explained through the following illustrative examples.

Chapter heading : CHAPTER 1
INTRODUCTION

Division heading : 1.1 OUTLINE OF THESIS

Sub-division heading : 1.1.2. Literature Review

The word CHAPTER without punctuation should be centered 50mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in capital letters. The text should commence 4 spaces below this title, the first letter of the text starting 20mm, inside from the left hand margin.

The division and sub-division captions along with their numberings should be left justified. The typed material directly below division or sub-division heading should commence 2 spaces below it and should be offset 20mm from the left hand margin. Within a division or sub division paragraphs are permitted. Even paragraph should commence 3 spaces below the last line of the preceding paragraph, the first letter in the paragraph being offset from the left hand margin by 20 mm.

8. NUMBERING INSTRUCTIONS:

8.1 Page Numbering

All page numbers (whether it be in Roman or Arabic numbers) should be typed without punctuation on the upper right hand corner 20mm from top with the last digit in line with the right hand margin. The preliminary pages of the thesis (such as Title page, Acknowledgement, Table of Contents etc.) should be numbered in lower case Roman numerals. The title page will be numbered as (i) but this should not be typed. The page immediately following the title page shall be numbered (ii) and it should appear at the top right hand corner as already specified. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.

8.2 Numbering of Chapters, Divisions and Sub-Divisions

The numbering of chapters, divisions and sub-divisions should be done using Arabic numerals only and further decimal notation should be used for numbering the divisions and sub- divisions within a chapter. For example sub-division 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The caption for the sub-division should immediately follow the number assigned to it.

Every chapter beginning with the first chapter should be serially numbered using Arabic numerals. Appendices included should also be numbered in an identical manner starting with Appendix 1.

8.3 Numbering of Tables and Figures

Tables and Figures appearing anywhere in the thesis should bear appropriate numbers. The rule for assigning such numbers is illustrated through an example. Thus, if a figure in Chapter 3, happens to be the fourth then assign 3.4 to that figure. Identical rules apply for tables except that the word Figure is replaced by the word Table. If figures (or tables) appear in appendices then figure 3 in Appendix 2 will be designated as Figure A 2.3. If a table to be continued into the next page this may be done, but no line should be drawn underneath an unfinished table. The top line of the table continued into the next page should, for example read Table 2.1 (continued) placed centrally and underlined.

8.4 Numbering of Equations

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering commencing a fresh for each Chapter or Appendix. Thus for example, an equation appearing in Chapter 2, if it happens to be the eighth equation in that Chapter should be numbered (2.8) thus:

$$\frac{C(s)}{R(s)} = \frac{G_1 G_2}{1 + G_1 G_2 H} \quad (2.8)$$

While referring to this equation in the body of the thesis it should be referred to as Equation (2.8).

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- One copy of the Ph.D. thesis should be submitted in CD after the viva-voce examination duly certified by the supervisor that all the corrections suggested by the examiners have been carried out.

APPENDIX I

Title of the Project Work (Thesis)

***A Thesis
Submitted by***

(Name of the Candidate)

***In partial fulfillment for the award of the degree
of***

DOCTOR OF PHILOSOPHY

in

Computer Science and Engineering (Respective Specialisation)

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NAME OF THE UNIVERSITY

PLACE – PIN CODE

Month, Year

APPENDIX 2

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of***

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(By Research) – If applicable***

in

Computer Science and Engineering (Respective Specialisation)

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APPENDIX 3

Decipherable Font Size and Type. 12 New Roman with the Bold Fonts wherever needed. The Contents of the Thesis should be in the following given order.

Yes	No	Remarks
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3. The (content, page No. of) the following given in order	:	
a) Bonafide Certificate	:	
b) Abstract (Double Spacing 20.5 cm x 25 cm) Acknowledgement	:	
c) List of Tables (Check numbers)	:	
d) Table of Contents (Check alignment etc.)	:	
e) List of Figures (Check alignment etc.)	:	
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4. Thesis size (20.5 cm x 29 cm) after trimming	:	
5. Margin specification correct as per Instruction sheet.	:	
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7. Spacing 1/2 for word processor tables	:	
8. Page Numbers given for Figs., Tables & Other pages serially.	:	
9. Page No. position given correctly.	:	
10. Sub Divisions if under lined, please delete the same.	:	
11. Tables: Numbered properly. No. & caption given on top continuation marked.	:	
12. Figures: Numbered properly. No.& caption given below.	:	
13. Margin specification adhered to computer print out O.K.(Mark.)	:	
14. Binding O.K. cover page white with Black calico edge.	:	
15. References are marked in the text within brackets.	:	
16. All the references are referred to in the text.	:	
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Year:	:	
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P.P. :	:	
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A **Monograph** is a specialist work of writing on a single subject or an aspect of a subject or on single theme or emerging technique/concept, usually by a single author, however, two or more authors can bring out a Monograph. A monograph is commonly regarded as vital for career progression in many academic disciplines. Monographs are intended for other researchers and bought primarily by libraries; monographs are generally published as individual volumes in a short print run.

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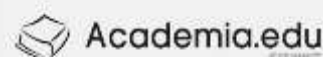
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An important point to note is that originality reports **do not detect plagiarism** – they merely highlight matched text, thus aiding you in checking that your work is correctly cited and referenced.



How do I access the originality report?

The report is produced when you submit an assignment to the draft folder. Your lecturer can tell you if your assignment has the option of draft submission, and where to find the link within BlackBoard. The first time you submit your work to the draft folder, you will receive your originality report within minutes. To access the report, click on the 'assignment inbox' tab, as shown below:



- If your report is ready to view you will now see a percentage figure (if it is not ready you will see a grey box). This is known as the 'similarity index' percentage, which is the percentage of your document that has been matched to other sources.
- When you click on the percentage figure you will then be shown the more detailed originality report.

Turnitin DRAFT submissions
ASSIGNMENT INBOX & PORTFOLIO

	START	DUE	POST	STATUS	ACTIONS	
Turnitin DRAFT submissions					Expand this assignment	
PAPER	10-Feb-2011 9:00AM	30-Dec-2012 11:59PM	31-Dec-2012 11:59PM	● Submission for this assignment is complete.	Hide details <input type="button" value="Resubmit"/>	
<p>assignment title: Turnitin DRAFT submissions</p> <p>assignment instructions: This DRAFT submissions area is intended as a formative learning tool only, where students can submit their DRAFT work and receive originality reports to help them in citing references correctly.</p> <p>search criteria: internet, TurnitinUK student paper database, periodicals, journals, & publications</p> <p>allow late submissions: yes</p>						
Paper Title				Report	GradeMark	Download
my assignment				15% 	Pending	

For any subsequent submissions it can take up to 24 hours to receive your report. This will overwrite your previous report, so if you want to keep a copy of it there are 'print' and 'download' buttons at the bottom of the originality report window.

You can submit your work into the draft folder as many times as you wish up to the hand in date of your assignment.

The 'similarity index'

This is the percentage of text in your assignment that has been matched to other sources.

If the figure is high, it does not necessarily mean that you have plagiarised as the report could be text matching against the following:

- Quotations that have been correctly referenced.
- Your bibliography, where the citations you have used could be exactly the same as those of another student.
- A common phrase or series of words used in context to the topic.

Similarly, a low or zero percent similarity index does not necessarily mean that plagiarism has not taken place. As there are many sources that Turnitin does not check against, the similarity index cannot be used as an indicator of whether plagiarism has occurred or not.

What information is included in the report?

- An overall 'similarity index' percentage. This indicates the amount of text in the whole assignment that has been matched with other sources.
- Text that has been matched will be number/colour coded for easy reference.
- The 'match overview' appears on the right hand side of the screen. This is a list of suggested original sources and the percentage of text that has been matched against each source.

The screenshot shows a Turnitin Document Viewer interface. On the left, a document is displayed with several paragraphs of text. Some text is highlighted in red, and small colored squares (1-4) are placed at the start of these highlighted sections. On the right, a 'Match Overview' sidebar is visible, showing a total similarity index of 87% and a list of four sources with their respective match percentages: 1. www.telegraphindia.com (26%), 2. Zhang, H. 'A' parse-1 (25%), 3. Anderson, M.S. 'The p... (20%), and 4. www.letsinfo (15%).

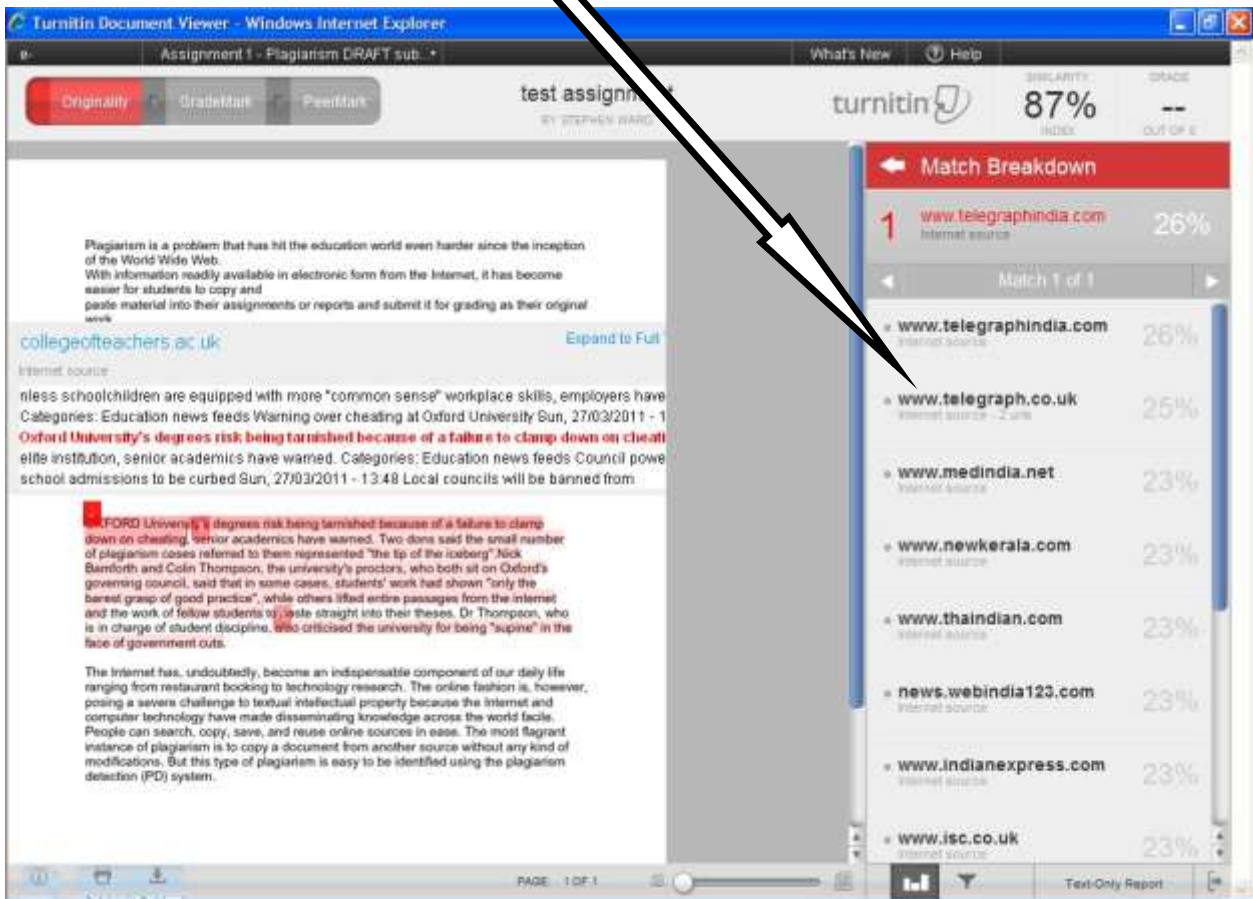
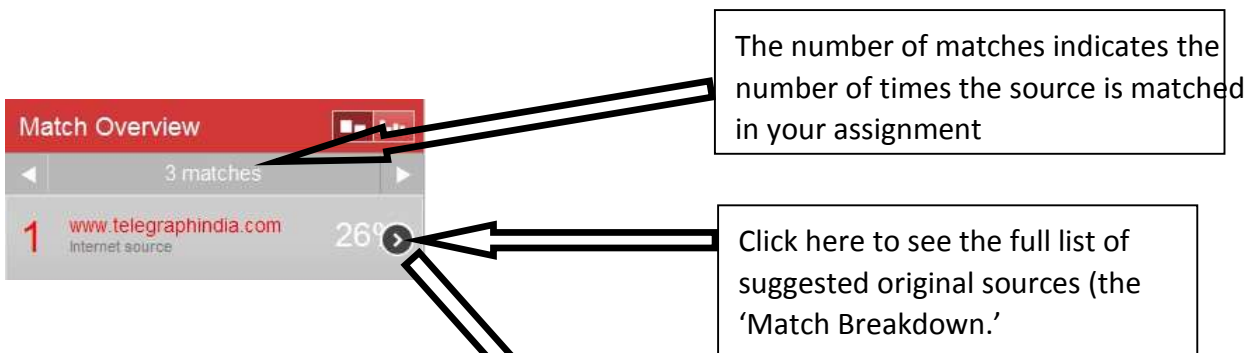
Annotations with arrows point to specific elements:

- A box at the top left explains the 'Similarity index – the percentage of text within the assignment that has been matched with other sources.' An arrow points to the 87% similarity score.
- A box in the middle explains 'The matched text is highlighted and number/colour coded for easy reference.' Arrows point to the highlighted text and the numbered markers.
- A box at the bottom right explains 'The 'match overview' provides the suggested original sources plus a percentage breakdown of how much text is matched against each.' An arrow points to the Match Overview sidebar.

Viewing the Match Breakdown

By clicking one of the sources in the match overview, you can see how many times that particular source has been matched in your assignment.

At this point an arrow appears next to the source which you can click to show a list of additional sources that could be the original source of the text. This is known as the 'Match Breakdown' and is shown on the example below.



From the 'match breakdown' list you can click on any of the sources to view the content in its original format (see below).

The screenshot shows a 'Match Breakdown' window with the following data:

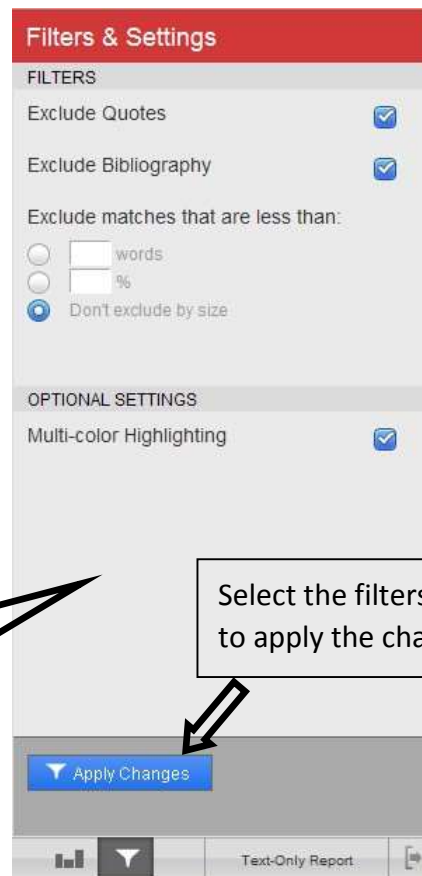
Rank	Source	Percentage
1	www.telegraphindia.com Internet source	26%
Match 1 of 3		
•	www.telegraphindia.com Internet source	26%
•	www.telegraph.co.uk Internet source - 2 urls	25%
•	www.medindia.net Internet source	23%

An arrow points from the 26% match for www.telegraphindia.com to a callout box: "Click here to view the source in its original form." Another arrow points from the callout box to the newspaper article below.

The newspaper article is from **The Telegraph**, Calcutta, India, dated Tuesday, March 29, 2011. The headline is "Warning over cheating at Oxford" by Tom Rowley. The article text reads: "London, March 28: Oxford University's degrees risk being tarnished because of a failure to clamp down on cheating at the elite institution, senior academics have warned. Two dons said the small number of plagiarism cases referred to them represented just 'the tip of the iceberg'."

Filtering options

Some text matches are easily explained, such as quotations and bibliographies. You can exclude these from the originality report by clicking the filter button (see example below). Here, you can also exclude matches that are less than a certain number of words or less than a certain percentage. If you select some/all of these filters, you also need to click on the 'apply changes' button for them to take effect.



Select the filters, then click to apply the changes.

Click on the 'filter' button to exclude quotes and the bibliography from the originality report. You can also exclude matches that are less than a certain number of words or percentage.

Use of originality reports by tutors

When you submit your assignment to the Turnitin FINAL submission area, a final originality report is included with it, which your tutor will be able to access. They will not use this to detect plagiarism – they will use this as an assistive tool to check any work that they already suspect to be plagiarised.

LITERATURE REVIEW – SOME USEFUL INSTRUCTIONS

- ☆ *When you are making notes from Journal/Conference Papers/Articles, the salient features of each research paper/article, simultaneously, key in everything in your own system or in office/institution periodically. Always make sure in keeping two or more soft copy in different folder and periodically copy it and update it in 2 CDs (1 for emergency backup) and or in thumb drive (Memory Stick – USP Drive / Removable Disc). It will be very useful in most of the cases where there is no CD writer and the file size is too large). Also, periodically update the entire matter in your own e-mail account, preferably in your G-mail Account.*
- ☆ *Ensure the safety of data entered into the system. Till you compile and prepare the final thesis and take printout after having two or more soft copy is always advisable to avoid loss of valuable data and time (Which is more precious, and that is not a reversible process).*

PLAN

- ☆ *Daily / Weekly / Fortnightly / Monthly*
- ☆ *Read at least one research paper a day (If it is not possible at least in 3 days).*

Within 6 months at least 100-150 paper should be read and try to have at least 150-200 references and excerpts / core ideas to make a chapter on “LITERATURE REVIEW”. The same consolidated report on Literature Review can be a paper for publication in National / International Journals.

EXTENSIVE & INTENSIVE, LITERATURE REVIEW

- ☆ *Consolidate the notes of Literature Review with appropriate references (Primary & Secondary sources). You have to do this exercise, simultaneously, meticulously, whenever you are reading / studying a review / research papers from journal / conference proceedings.*
- ☆ *Periodic Intervals, it can be typed in a computer and updated accordingly.*
- ☆ *Take care, of relevant references (Bibliography). Always, maintain all the references, with one common standard format. By doing this, at the end of the first year of your research career, you will have 45% of the content (One major chapter of your final) of your thesis is ready. With which, you can publish one or more papers. Easily can be made out of it.*
- ☆ *Normally, such papers can be titled as following;*
 - *Study on*
 - *Studies on*
 - *Analysis on the study*
- ☆ *Almost, all the leading international journals will publish such an extensive study. Even, at the International Conferences it could be presented.*

List of References - *Any works of other researchers are used either directly or indirectly the origin of the material thus referred to an appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designated by the name of the first author followed by the*

year of publication, placed inside brackets at the appropriate place of reference. The citation may assume anyone of the following forms.

Examples of Citation

- ☆ An improved algorithm has been adopted in literature (Tsychiya 1980)
- ☆ Jankins and Walts (1968) have dealt at length this principle.
- ☆ The problem of mechanical manipulators has been studied by Shin et al (1984) and certain limitations of the method used, has been pointed out by Shin et. al. (1984 a).
- ☆ The listing should be typed 4 spaces below the heading "REFERENCES" in alphabetical order in single spacing left justified. The reference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the year and other details. A typical illustrative list given below relates to the citation example quoted above.

REFERENCES

5. Aripnammal S. and Natarajan S. (1994) "Transport Phenomena of Sm Se $1-x$ As x " *Pramana - Journal of Physics* Vol. 42 No.5 pp.421-425.
6. Barnard R.W. and Kellogg C. (1980) "Applications of Convolution operators to Problems in univalent function theory", *Michigan Mach. J.*, Vol 27, pp 81-94.
7. Jankins G.M. and Walts D.G. (1968), "Spectral Analysis and its Applications" Holder Day, Sanfrancisco.
8. Shin K.G. and Mckay N.D. (1984), "Open loop minimum time control of mechanical manipulations and its applications", *Proc. Amer. Contr. Conf.*, San Diego, CA, pp.1231-1236.

INTELLECTUAL PROPERTY RIGHTS (IPR)

If you are looking for an innovative outcome, then, there is no need for making efforts to publish any of your ideas / solutions in either conferences / journals. Then try to file a patent(s) in the course of your research study.

Overview of Plagiarism Detection Software

This table gives an overview of available plagiarism detection software. For a look at the issues involved with the effectiveness of the software, please see "[Plagiarism Detection Software: How effective is it?](#)" You may also find it useful to compare features of the software using [this table](#).

NAME	FEATURES/TECHNIQUES	PROS/CONS	COSTS
Copycatch http://www.copycatch.free-serve.co.uk/vocalyse.htm	<p>A UK system which concentrates on comparison within a group of students. The software compares text from work collected by email or on disk using a similarity threshold that will detect essays which are very similar or dissimilar to other class essays by communitiy of words and phrases.</p>	<p>PROS: The JISC (Joint Information Systems Committee - HEFCE-funded UK organization) gave these software five stars for detection, clarity, value, user-friendliness, speed and reliability.</p> <p>CONS: Detects only collusion among students, and cannot detect material downloaded from the Web</p>	<p>Approx \$700 AUD to purchase software.</p>
Glatt Plagiarism Screening Program (GPSP) http://www.plagiarism.com/INDEX.HTM	<p>Uses the 'fingerprint' method. It exploits the uniqueness of each individual's linguistic patterns - 'cloze' technique. It eliminates every fifth word of a student's paper and replaces the words with a blank which the student is asked to fill in. The number of correct responses is one of the factors considered in the production of a final probability score.</p>	<p>PROS: Useful for detecting plagiarism where the original source material cannot be located.</p> <p>CONS: Students actually have to sit down to a test to fulfill the requirements.</p>	<p>Approx \$580 AUD to purchase software. Additional financial commitment is required for a subscription to the Plagiarism Screening Service to provide the scoring for submitted tests.</p>
<p>Turnitin.com is the user portal for Plagiarism.org. http://www.turnitin.com/</p>	<p>The technology used is called 'document source analysis'. It uses a set of algorithms to make a digital fingerprint of any text document, and then compares it against Internet sources and against an in-house database. Results are compiled into an 'originality report' which colour-codes and underlines text passages showing similarities to other sources, and gives the URLs of the sources.</p>	<p>PROS: Covers a huge range of sources. Offers a digital portfolio service. in which students' work is archived.</p> <p>CONS: The user has to check the report carefully because the software detects correctly-cited material as well as plagiarized material. As in similar programs, formatting is lost in the checking procedure, so essays for marking have to be submitted separately from essays for checking.</p>	<p>A free one-month trial is available. Costs are for subscription rather than purchase and vary according to extent of commitment. The web page provides quotations depending on numbers of classes, numbers of students, and so on.</p>
EVE2 - Essay Verification Engine http://www.canexus.com/eve/index.shtml	<p>Performs searches to find Internet sites with similarities to the submitted text. Produces report underlining text passages possibly plagiarised.</p>	<p>PROS: Tests against wide area of internet.</p> <p>CONS: Each piece of work has to be individually loaded and checked by the lecturer.</p>	<p>Download free for 15 days; purchase for approx \$40 AUD. Each user must purchase a separate copy and license.</p>
Plagiserve http://www.plagiserve.com/	<p>A system which checks the originality of reports by comparing students' work with its own database and the internet. It provides an originality report that colour</p>	<p>PROS: Tests against extensive in-house database and internet searches</p> <p>CONS: Formatting is lost during the checking process, so material has</p>	<p>Free.</p>

	codes possibly plagiarised passages and provides direct links to the original source.	to be handed in separately. Has been claimed to be associated with cheat sites.	
WordCHECK DP http://www.wordchecksystems.com/wordcheck-dp.html	Software which profiles documents by identifying key word use, allowing users to search manually for matching documents based upon word use and frequency patterns. Uses an internal database. Produces report with key-word profiles and word frequency lists.	PROS: Similar system to Copycatch. CONS: Uses only internal database. Manual checking of each piece of work is very time-consuming.	Profiler Basic \$185 (\$115 academic price) Profiler Pro \$570 (\$345 academic price) Users can add "profile capacity" as they go: 2,000 profiles - \$380 5,000 profiles - \$760 10,000 profiles - \$1,540 (All dollars approximate AUD.)
WordCHECK RA http://www.wordchecksystems.com/wordcheck-ra.html	An up market package which is aimed at academic research rather than student assignments. Works on the same principles as the DP version.	PROS: As for the DP version. CONS: As for the DP version.	RA Individual Desktop \$380 (\$185 academic price) RA Department Desktop \$1,925 (\$1,347 academic price) plus profile expansion (All dollars approximate AUD.)
Moss http://www.cs.berkeley.edu/~aikenn/moss/html	MOSS is an acronym for Measure of Software Similarity - an internal system at Berkeley developed specifically for computer programming fields.	PROS: Designed with a special focus on computer programming code rather than text. CONS: Limited in scope.	Free but restricted to instructors and staff of computer programming courses. A request must be sent to use.

SIM http://www.cs.vu.nl/~dick/sim.html and http://www.cs.vu.nl/pub/dick/similarity_tester/	Another computer code plagiarism detector. SIM tests lexical similarity in a number of languages including Java, Pascal, Lisp, and Miranda. It detects potentially duplicated code fragments in software projects.	PROS: As for Moss CONS: As for Moss	Available free through the website of the Vrije Universiteit, Amsterdam, where the software was developed.
JPlag http://www.wipd.ira.uka.de:2222/	System that finds similarities among multiple sets of source code files. Designed for detecting plagiarism in computer programming but can support plain text as well (although with less satisfactory results).	PROS: The only software that can deal with programming-type work as well as ordinary text. CONS: Limited and less effective in its use with ordinary text.	Free, but an account must be applied for on the website.

Google http://www.google.com	Primarily a search engine and not a plagiarism detector, Google is nevertheless able to detect phrases and can rapidly identify source material from the Internet.	PROS: Quick and free. Google extracts from pdf files, which many search engines cannot do. CONS: Unsystematic, and involves manual entry of strings. Labour-intensive.	Free
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(Ref: <http://www.cshe.unimelb.edu.au/assessinglearning/03/plagsoftsumm1.html>. Accessed on 09.02.2015 at 11 PM)

Kindly Read the Following Links, if interested to know more about the Software/Industry involved in these Products:

- <http://www.ithenticate.com/products/faqs>
- <http://www.scanmyessay.com/plagiarism-free-software.php>
- <http://www.plagtracker.com/turnitin.html>
- <http://en.writecheck.com/home/>
- <http://www.turnitin.com/>

Similarity Index: Myths and Realities

Many free plagiarism checker (such as similarity index software of different developers) services add our manuscript to **many** databases and store or share uploaded files, which will be counterproductive to our good intentions. Once the check has been done with this kind of so called free software, it (some of this software) retains the file in its data base or in multiple locations. Even after meticulous efforts of rewriting/paraphrased or even carried out all the necessary corrections (citations/references etc) as envisaged by the author, if he/she checks with the same software again, sometimes, it will show much more alarming Similarity Index to their surprise, just because of his/her own earlier version of the same paper stored in the data base!

One need to take care of his/her privacy issues very seriously when they post their document for checking, using this so called free software!. In Capitalism (so called free trade/market economy/globalization of west), nothing comes free of cost. They rob everyone directly or indirectly or clandestinely/surreptitiously without their notice under their very nose. Many of them are not even protecting the uploaded data with the latest encoding and data security methods. Our papers are likely to be saved or stored in multiple databases, and we will be tracked for our actions constantly/continuously!

"No software seems to discriminate between quotations which are properly cited and those which are unacknowledged: what the software detects and notifies is duplication. So reports issued by plagiarism software alert the user to what may appear to be plagiarized material that is in fact appropriately referenced. Manual checking and human judgment are still needed". (<http://www.cshe.unimelb.edu.au/assessinglearning/03/Plag2.html>. Accessed on 09.02.2015 at 11.02 PM)

Suggestion:

These are very good tools to compare/evaluate quickly our own writing style and helps one to improve upon it. It also helps one to avoid the expression of existing way of telling the same thing etc and leads to better presentation/expression/originality etc. (these may be used "as a teaching tool to address citation and academic honesty, not only as a punitive tool"). However, One can have judicious use of such software after getting it evaluated by team of experts with adequate domain knowledge/expertise/competency, then one can buy/use it under due license/free/supervision etc as applicable. Beware of the process, do not rely too much on anything and try to have a balanced approach based on your own logical reasoning/wisdom.

Review of Literature on Similarity Index and Some Views of Users

Plagiarism or Similarity/Similarity Index

At this time of year, we hear a lot of chatter from students via Twitter (follow us: @turnitin) saying, "turnitin says my essay was 23% plagiarized," or "just submitted my paper to turnitin... 4% plagiarism is good right?," or "my Turnitin plagiarism percentage is only 18%."

There is a very distinct difference between what Turnitin flags as matching text (aka: similarity index) and plagiarism. Turnitin will highlight ANY matching material in a paper—even if it is properly quoted and cited. Just because it appears as unoriginal does not mean it is plagiarized; it just means that the material matches something in the Turnitin databases.

We leave it to the instructors to look at a paper and the originality report to make the determination of whether or not something is plagiarism, and to what extent—intentional plagiarism, unintentional plagiarism, improper/lack of citation, or mere coincidence. Best practices from instructors suggest that Turnitin OriginalityCheck be used as a teaching tool to address citation and academic honesty, not only as a punitive tool.

There is also a helpful video for instructors on how to view the OriginalityCheck Report and goes over many of the OriginalityCheck features. There is a similar video tutorial for students on how to view their OriginalityCheck feedback as well.

Ref: http://turnitin.com/en_us/resources/blog/422-training/1686-plagiarism-or-similarity Accessed on 10.02.2015 at 1.10 AM

Warning: These indices in no way reflect Turnitin's assessment of whether a paper contains plagiarized material or improperly used material. The Originality Report provides instructors with a tool to more easily locate matching or similar text within the text of a submitted work. The determination and adjudication of proper citation and plagiarism are left solely to the instructor and institution to which the work was submitted. Any questions regarding the definition of plagiarism used at your institution should be directed to the instructor of the class or an appropriate institutional staff member.

Ref: http://turnitin.com/en_us/training/student-training/about-originalitycheck Accessed on 10.02.2015 at 2.30 AM

Some Important Views of Users:

Maria Jean • 6 months ago

I just had to prove myself (my course convenor emailed me a formal concern about plagiarism) because there're 3 sentences of direct quote were shown as not quoted properly. I actually did quote properly but they came from different journals (mine from Canadian Justice Dept and turnitin showed one from Canadian Law Journal, which I've never come across), though the same author and the same paper. Turnitin flagged these 3 sentences and I had to write an essay of 2300 word just to prove myself...and put in writing of what I thought of the system....and they thought I cannot do an essay properly! I'd have to say that turnitin could really be misleading, even more, a marker, who is not properly trained, don't understand, that similarity does not mean plagiarism! Turnitin cannot pick-up a direct quote even when it's cited properly! Even more, an author sometimes posts their work in more than 1 website or journal, so if my source doesn't match turnitin source, it flags plagiarism because of not citing a proper reference.

Abo Khattab Al-Iraqi karim • 2 months ago

Must be something wrong, Turnitin used to keep the last version of your document then when you upload a new one it will compare together. I think that's why you got this high percentage of plagiarism.

Otherwise you're not writing thesis!!

The Seeker of All Knowledge • 10 months ago

It is not plagiarism in your essays when your name comes up as highlighted it just means someone else with the same name has sent their essay into the system and it happens to be in the same place as yours is, simple coincidence really. But with 82% your kind of fuaaaaarked.

Sharon Rosey • 3 months ago

is turnitin has updating database? i checked my paper once using turnitin without references it has shown 70%. After the modifications, i checked once again but this time it was checking with the paper which i previously inserted.

Gregory Williams • 4 months ago

I wrote a paper and used Grammarly to check for plagiarism and got 10% and when I used Turnitin My Similarity came back 68%, but the 68% was from paper that had already been submitted through Turnitin that is a big discrepancy.

WHAT IS AN ACCEPTABLE TURNITIN PERCENTAGE?

The short answer is less than 24%.

The longer answer is that it depends. Firstly you need to exclude the "Works Cited" or "Bibliography" from the test run. Then you have to look at where the plagiarism matches are coming from. Let me show you some quotes:

"Students check their assignments in Turnitin revision classes before submitting them. They attach the Turnitin report to their work when it is handed in. A generous cut-off of 25 per cent matched text was allowed in this pilot. Any essays with higher than this percentage matching must be explained by the students. Students also sign a declaration that the work is their own and that they understand what plagiarism is."

-Sheffield University

Or this interesting point:

An originality report may have a similarity index of 24% with the similarity coming from hundreds of different sources, each making up less than 1% of the student's work, other originality reports with an index of 24% may have the similarity coming from just one or two web pages or published sources, potentially a much more serious matter.

- University of Glasgow

Or this slightly different perspective:

Students soon become minutely concerned with what Turnitin's percentage score means in its report. For Turnitin, zero percent means there is no overlap between a paper and any other. One hundred percent means there is a total case of plagiarism. I have found that the scores I prefer range between 20 and 35 percent. Rather than plagiarism, these scores usually confirm that this is a robust research paper with substantial use of quotations, footnotes, and bibliography. It is these two things—footnotes and bibliography—which most inflate Turnitin's score. A very low score indicates a paper with few footnotes and references. A very high score indicates a "cut and paste" job which, even if footnoted, is unacceptable to me. The highest score I have ever seen is 85 percent in a paper in which Turnitin flagged the entire first two pages in red, indicating they came from other sources. Yet, the student had footnoted those pages faithfully and persistently throughout. For me, this was less a case of deliberate plagiarism than one of a student who had no idea how to write a research paper and use sources properly.

-California State University

And finally this from UCLA:

Therefore, the initial plagiarism percentage rating cannot be used as a trustworthy indication of the degree of plagiarism. Using an example from my course: one student posted a paper that received an initial score of 64% plagiarized, but upon inspecting the paper I saw the majority of the matches came from properly quoted material and the references cited section. After checking the accuracy of the citations and references, I excluded them from the match and the paper returned a score of two percent.

- UCLA

Here at Tailored Essays we look for a score of below 15% for fully original work such as the main body of a PhD. But we just want to get a score of below 24% for the Literature Review or any other work that is heavily based on existing published work. Naturally our scores are usually well below those numbers as our work is fully custom written and checked through WriteCheck (part of Turnitin).

Slawomir wrote:

May 17, 2012 at 1:43 am

This is why people should use their own judgement to check somebody's paperwork, rather than using stupid automated systems that only compares what's been found without comparison of the writing style, referencing ect. Plagiarism is a serious allegation and it shouldn't be based only on some automated system as the system will never be so much clever as human being. I basically don't believe in turnitin as only artificial intelligence could stand the level of human checks in somebody's paperwork.

Rebekah Friday wrote:

May 28, 2012 at 3:44 pm

For a closed book essay examination (5-6 pgs) where there is no requirement for references how is plagiarism defined or viewed?

faisal wrote:

July 23, 2012 at 12:03 pm

Turnitin is a unmatore software...one day will come ur research will come to an end by this software remember this is a worst software in the world. the software catches even sentence structure and one day the all sentence will finished by this software and we will ought to be use alien language instead of English okeyyyyyyyyyyyyyyyyyy Mr turnitin. Please shut this stupid software immediately...otherwise u will be defamed by its users....

Robert wrote:

November 8, 2012 at 8:54 am

I appreciate the top reference to allowable scores for turnitin. My papers continue to get hung up in the system. I was responsible for the change of a process and system in the military due to Soldiers careers being effected. Does anyone know where the acceptance of liability notice from TURNITIN is. If you can change a letter or word in a sentence and it lower or increase your score there is a glitch in the system.

Jenny wrote:

March 8, 2013 at 6:05 pm

I recently submitted a research paper with a 28% from Turnitin. I faithfully did research, used appropriate citations, and gave credit where credit was due. Turnitin is a double edged sword because the more research is reviewed and used; the more information is cited—therefore a higher unoriginality score is given. Before the web. We would go to the library—and use the information we read in books. Was it plagiarism?? Of course not! And just because the information is more conveniently located on the web doesn't mean it is plagiarism. It is only Plagiarism if the citations and source is not properly attributed in the body of work or the bibliography. Being an honest and hardworking student, seeking information should not be penalized.

admin wrote:

February 7, 2012 at 8:00 am

This is a genuine problem and causes many people much grief. You are correct that, especially in short essays, Turnitin frequently catches inadvertent plagiarism. In my business we sometimes get high Turnitin percentages for work that is custom written because, as you state, there are only so many ways of expressing a point. This is why we use Write Check to check the work before we submit it to the client. When I rewrite a paper to get the Turnitin score down I sometimes have to use rather abstruse language in an effort to make the paper more original. This problem is only going to get worse as the Turnitin database grows larger each year.

Ref: <http://www.tailoredessays.co.uk/?p=178> Accessed on 10.02.2015 at 3.21 AM

Also Refer:

https://www.researchgate.net/post/What_is_the_range_of_percentage_similarity_of_plagiarism_for_a_review_article

Prof. Ravi K. Sharma · Central Drug Research Institute

A review is a review of others' work and could be written in three ways.

1. Topic wise, who has done what, in authors own words/lines/paragraphs with due credit to the authors /with citation of source.
2. True Analysis/ summarization of the work done so far in a particular subject/area or topic with due source citation.
3. A mixture of 1 and 2.

All depends on time devoted on the review.

To me a reader should be able to get easily understandable, well written, correct & authentic information. Only the reviewer should not fail to cite the source of information and also he or she should not take the credit of others' work. A google search on "Plagiarism" returns 36,300,000 hits. With so much is written, it is therefore, if due credit is given to the author for the original work/publication, then it is not Plagiarism, even if original paragraphs/lines/words are inserted in the review maintaining consistency. I feel that we should be honest and work for the betterment of Science.

For read more responses click to the link above

<p>FORM I THE PATENTS ACT 1970 (39 OF 1970) & The Patents Rules, 2003 APPLICATION FOR GRANT OF PATENT <i>[See section 7, 54 & 135 and rule 20 (1)]</i></p>	<p>(FOR OFFICE USE ONLY)</p> <p>Application No.:</p> <p>Filing Date:</p> <p>Amount of Fee Paid:</p> <p>CBR No.:</p> <p>Signature:</p>			
1. APPLICANT				
a) Name	b) Nationality	c) Address		
<i>Inventor's name</i>	<i>Indian</i>	<i>Permanent Address</i>		
2. INVENTOR (S)				
a) Name	b) Nationality	c) Address		
<i>Inventor's name</i>	<i>Indian</i>	<i>Permanent Address</i>		
3. TITLE OF THE INVENTION Title to be added				
4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / AUTHORIZED PATENT AGENT IN INDIA		Telephone No. : Fax No. Mobile No. E-mail :		
5. PRIORITY PARTICULARS OF THE APPLICATION (S) FILED IN CONVENTION COUNTRY				
Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
<i>Not Applicable</i>				
6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE				
<i>International Application Number</i>			Not Applicable	
7. PARTICULARS FOR FILING DIVISIONAL APPLICATION: Not Applicable				
8. PARTICULARS FOR FILING PATENT ADDITION: Not Applicable				
9. DECLARATIONS :				
(i) Declaration by the Inventor (s)				
We, the above named inventor(s) are the true & first inventor(s) for this invention and declare that the applicant(s) herein is our assignee.				
(a) Date		Date		
(b) Signature (s)		Signature		
(c) Name(s)		Inventor's name		

a) Date Date (b) Signature (s) Signature (c) Name(s) Inventor's name	Date Signature Inventor's name
(ii) Declaration by the applicant (s) in the convention country I/We, the applicant(s) in the convention country declare that the applicant(s) herein is our assignee (a) Date (b) Signature (s) (c) Name(s) of the signatory Not Applicable	
(iii) Declaration by the applicant (s): I/We, the applicant(s) hereby declare(s) that:	
a) We are in possession of the above mentioned invention. b) The complete specification relating to the invention is filled with this application. c) There is no lawful ground of objection to the grant of the Patent to me/us. d) I am/We are the assignee or legal representative of true & first inventors.	
Signature (s) Signature Name(s) Inventor's name	Signature Inventor's name
Signature (s) Signature Name(s) Inventor's name	Signature Inventor's name
10. Following are the attachments with the application:	
a) Complete specification (in conformation with the International Application) / as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies). No. of pages XX No. of claims XX	
b) Drawings (in conformation with the International Application) / as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies). No. of sheets XX	
c) Statement and Undertaking on Form 3 d) Declaration of Inventorship on Form 5 e) Request for Examination on Form 18 f) Fee Rs.in Cash/Cheque/Bank Draft bearing no. Date On Bank.	
I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters stated herein are correct and I/We request that a patent may be granted to me/us for the said invention.	
Dated this XX day of March 2016 .	
Signature (s) Signature Name(s) Inventor's name	Signature Inventor's name
Signature (s) Signature Name(s) Inventor's name	Signature Inventor's name
To, The Controller of Patent The Patent Office, at Chennai	

FORM 3
THE PATENT ACT, 1970
(39 OF 1970)
&
The Patents Rules, 2003
STATEMENT AND UNDERTAKING UNDER SECTION 8
(See section 8, rule 12)

We *Inventor's name and Inventor's name* hereby declare

(i) that we have not made any application for the same/substantially same invention outside India

(ii) **Not Applicable**

that /We who have made this application No. Dated alone/jointly with....., made for the same/substantially same invention, application(s) for patent in the other countries, the particulars of which are given below :

Name of the country	Date of Application	Application No.	Status of the application	Date of publication	Date of grant
---------------------	---------------------	-----------------	---------------------------	---------------------	---------------

Not Applicable

(iii) that the rights in the application(s) have been assigned to us

a) Name	b) Nationality	c) Address

And that We undertake that up to the date of grant of the patent, by the Controller. We would keep him informed in writing the details regarding corresponding applications for patents filed outside India within three months from the date of filing of such application.

Dated this **XX** day of **March 2016**

Signature (s) **Signature**
Name(s) **Inventor's name**

Signature
Inventor's name

Signature (s) **Signature**
Name(s) **Inventor's name**

Signature
Inventor's name

To,
The Controller of Patent
The Patent Office, Chennai

4. STATEMENT (to be signed by the additional inventor(s) not mentioned in the application form)
Not Applicable

I/We assent to the invention referred to in the above declaration, being included in the complete specification filed in pursuance of the stated application.

Dated thisday of2016

Signature of the additional inventor(s): **Not Applicable**

Name:

To,
The Controller of Patent
The Patent Office, Chennai

4. ADDRESS FOR SERVICE:

Inventor's name

Address

Phone, Mobile & Email

Dated this **XX** day of **March 2016**

Signature (s) **Signature**
Name of the Signatory **Inventor's name**

Signature
Inventor's name

Signature (s) **Signature**
Name of the Signatory **Inventor's name**

Signature
Inventor's name

To,
The Controller of Patent
The Patent Office, Chennai