HINDUSTAN
INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)

Effect From June - 2018

Centre for Research & Consultancy
Policies

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Registrar
Hindustan Institute of Technology & Science
Padur, Kelambakkam,
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1.0 GUIDELINES FOR INDUSTRIAL CONSULTANCY

INTRODUCTION

The Hindustan Institute of Technology & Science (HITS) has been interacting with industries, research organisations and governmental agencies for taking up consultancy and sponsored research projects. These are either referred to the Institute or are sanctioned based on specific project proposals submitted by the faculty members. Such projects pose considerable scientific, technological and academic challenge to the faculty and students of our Institute. Further the academic programmes of the Institute are strengthened by such active interaction with the industries.

These projects and assignments require a great amount of scientific and technical input from the faculty and staff of the Institute. They have given an opportunity for the Institute staff to work on live problems of immediate relevance to the country. The students can also be trained to tackle such practical problems. Equally important is the fact that the knowledge and expertise of the Institute staff are available for solving some of the pressing technological problems facing the industry and the nation. These interactions of the Institute are implemented and coordinated by the office of Department of Research.

The projects or assignments coordinated by the Department of Research are divided into two types:

Sponsored Research Projects

These are R & D projects sponsored by Government agencies, industries or other institutions with a view to generate new knowledge, to develop a new technological process or to create new products. Considerable amount of studies and research/development work may have to be put in by the investigators to solve the problem and as such these projects are considered as R & D projects. These are long term assignments in emerging areas and in highly specialised fields of Science and Technology.

Industrial Consultancy Projects

Projects that can be executed and problems that can be solved readily, utilising the professional knowledge and expertise of the staff are classified as consultancy assignments. The Institute facilities may be used for research work, theoretical analysis or experimentation required for generating sufficient information and data for this problem solving operation, but these assignments are heavily dependent on the existing know-how and skill of the staff concerned. These are mostly related to the application of an already known technology. The procedures to be followed for undertaking such projects, the administrative controls exercised and the remunerations and incentives given to the staff for undertaking such inter institutional projects are described here.

CENTRE RESEARCH AND CONSULTANCY

INDUSTRIAL CONSULTANCY

Scope of Consultancy Services offered

Consultancy Services may be offered to Industries, Service Sector, Govt. Departments and other National and International agencies in niche areas of expertise available in the Institute.

The service offered shall be along the lines of 'Professional Services' and will hence carry with them obligations and ethical requirements associated with such services as indicated in the standard terms and conditions (Annexure I).

Consultancy services offered may cover a variety of activities such as Feasibility Studies; Technology Assessments; Assessment of Designs and / or Current Manufacturing Process; Material, Energy, Environmental and Manpower Audits; Product Design; Process Development, Software Development; General Troubleshooting, Retrofitting Exercises, Intensive efforts for transfer of highly focused skills and expertise to select groups in specific organizations, vision and strategy statement and so on.

Testing & Evaluation services are to be normally offered in selected specialized areas. In order to meet the needs of certain Governmental and related agencies, and special clients (with long term association with the Institute) routine testing services may be offered, but to a limited extent.

Standardization and Calibration services may be offered in areas in which facilities are available or can be augmented. Such services should normally be backed by periodic Calibration / Standardization of laboratory equipment used for such purposes.

Jobs which are too complex to handle, by virtue of certain constraints inherent in any academic and research environment - such as execution of certain types of works, should not normally be taken up irrespective of the availability of expertise and perceived needs of the clients.

All Consultancy and related Jobs need to be structured and executed in the spirit of promoting HITS-Industry Interactions, as a vehicle for augmenting (current) levels of excellence in teaching and research, for proper placement of HITS graduates (PhDs / M.Techs /B.Techs) and in the process, generating funds.

Project Category

Each project shall be undertaken either under Standard Terms and Conditions (included in Annexure I), or Specific research agreement or Memorandum of Understanding describing the details of contract. In the former case, the work is taken up in good faith between the consultant and the client, the obligations and responsibilities of both parties being limited by the standard terms and conditions. A copy of the Standard Terms and Conditions is attached as Annexure I.

The latter case refers to projects that usually involve non-disclosure agreements, detailed negotiations of contract terms and signing of contracts in the form of agreement or MOU

covering various aspects such as deliverables, milestones, payment schedules, role and responsibilities of the parties, non-disclosure of confidential information, disputes resolution, liability, IPR matters, arbitration, and applicable law. These projects involve significant amount of effort and time associated with the negotiation and implementation of the research contracts.

Consultancy and related services offered will be divided mainly into two categories:

Category E: Expert Advice and Development Projects:- This type of project will be Expertise intensive and based on the expertise of the Consultant .

Category T: Testing Projects:- This type of project will be Infrastructure intensive and will be based on extensive usage of the institute infrastructure.

Eligibility for Undertaking Consultation

Consultancy and related assignments can be taken up by full time faculty and Core Research Scientists and Engineers of Departments / Centres / Schools.

Any other employee of the Institute may take up consultancy work with prior approval of the Vice-Chancellor. All employees undertaking consultancy shall hereinafter be referred to as Consultant.

Conflict of Interest

Consultants shall disclose to the Director, Research in writing, the existence of (i) any relationship between him / her and the client funding the consultancy project or any vendor to whom payments are made from the project funds, in the form of involvement of any immediate relatives or (ii) any scope for potential disproportionate self-gain. Director, Research will review such cases and decide appropriately, with the advice of a committee, to ensure that no actual conflict of interest exists and that such an involvement by the consultant does not adversely affect the consultant's objectivity, integrity, or commitment to the Institute and to the profession.

Consultants may not use the Institute name or the fact that they are affiliated with the Institute, in a manner that

suggests that the Institute approves or disapproves of a product or service provided by a profit, non-profit or governmental entity or

suggests that the Institute has performed research or issued research findings when it has not done so, or misleadingly states the results of Institute research or

May be interpreted to communicate the official position of the Institute on any issue of public interest.

General Consultancy Rules

Consultancy work taken up by Consultants is subject to the following limits:

The time spent on consultancy and related assignments shall be limited to the equivalent of 52 working days in a year, preferably at the rate of one working day per week. In addition, Consultants may be permitted to utilize, on an average one non- working day per week.

Consultancy assignments may be taken up and implemented, within the constraints indicated above, provided they do not have any adverse impact on the ongoing academic, research and related activities. Further, such assignments need to be carefully scheduled in the light of ongoing commitments. If required, a clear indication of the earliest date on which the assignment can commence may be clearly spelt out in the proposal form.

The services of permanent employees of the Institute may be utilized for the execution of the consultancy projects provided it does not affect their primary functions and responsibilities to the Institute.

Students who are willing to work on consultancy projects may be permitted as per Institute norms to do so provided it does not affect their academic commitments and performance. Such work by students may be compensated by suitable honoraria.

Consultancy Rules: Related Travel

Travel out of the campus on account of consultancy activities should be undertaken with intimation to the Head of the Department / Centre / School. In case of Heads of these entities, intimations should be sent to the Vice-Chancellor.

Outstation travel on Consultancy Assignments may be undertaken normally with the prior approval of the Head of the Department / Centre / School, or, the Vice- chancellor (in the case of Heads of Department / Centre / Schools). It is, however, anticipated that such approvals will be given within two working days in order to ensure that prior commitments to clients are honoured. In emergencies, prior intimation and subsequent sanction could be considered acceptable.

Consultancy Rules: Consultancy Project Execution

Consultancy projects are normally initiated by requests / enquiries from the industry directly to the Institute or by discussion between the industry and the Consultants.

When the enquiry is directly received by the Institute, the work will be assigned to specific consultants or groups of consultants depending on their expertise, and existing commitments, by the Director, Research.

In the event of a client preferring the services of a specific consultant, the assignment may normally be assigned to the identified person, provided the requirements in respect of 2.5.1 and 2.5.2 are satisfied.

All acceptance letters will be sent by the Director, Research.

Consultancy project proposals (prepared in response to a client's request) are to be approved by the Director, Research who may examine the scope of the work and cost

estimates. It is essential to discuss proposed work plans with a client vis-a-vis the scope, in order to obtain clarity before the consultant prepares the cost estimates.

A form (as shown in Annexure –II) is also to be filled in giving the details of the infrastructural facilities to be provided by the Institute. The proposal together with the details of infrastructure required from the Department duly forwarded / approved by the Head of the Department(s) / Centre(s) is to be submitted to the Director, Research. The Director after the scrutiny of the project proposal and the Institute's commitments with respect to the infrastructure facilities, issues on behalf of the Vice-Chancellor, a Certificate for the Institute's willingness to extend support for the project utilizing the Institute's facilities.

In extreme emergencies, a consultant may take up an assignment with intimation to the Director, Research, and then seek approval. It would, however, be necessary to ensure that the task involved is not a major one entailing total charges not more than Rs.50,000/- or, two days of faculty time, and payments are made immediately, well before submission of any formal report.

The charges, once finalized, will not be negotiable. However, if the scope is altered, a fresh estimate may be considered.

The minimum charges applicable in respect of consultancy jobs will be Rs.10,000/- excluding any applicable tax.

It is desirable that Preliminary Diagnostic Discussions / Site Visits, leading to the generation of consultancy proposals may be charged at a minimum rate of Rs.5,000/- (or US$200 or equivalent in the case of international assignments) per day or part thereof, in addition to travel and incidental expenses as applicable. As an industry friendly move, the consultant may decide to absorb such charges for potentially large projects, into the final project cost.

Consultant should be aware of the potential for the generation of Intellectual Property during the execution of projects. The Intellectual Property Policy of the Institute will govern all decision and actions concerning the generation, handling, protection and commercialization of the Intellectual Property.

The services of external consultants (especially retired Faculty / Research Scientists/Research Engineers) may be utilised to a limited extent in order to provide comprehensive services to clients. Such external consultants will be entitled to a lump sum consultant fees which may be fixed after taking into account essential expenditure directly related to the assignment. Normal deductions by way of Institutional charges, and mandatory taxes will, however, be made. The consultant fees payable to External Consultants may not, normally, exceed 40% of the total project cost.

Consultancy Rules: Related Payment schedule

The charges for any assignment are normally payable in advance. However, exceptions may be made in respect of assignments involving charges exceeding Rs.1,00,000/- and with implementation periods exceeding 3 months.

In the case of large assignments, a payment schedule linked to milestones can be worked out. Such a payment schedule should ensure that (i) advance payment is received for every segment of work, and (ii) the number of installments is reasonable and consistent with ease of implementation. The number of installments may not exceed four for a project implemented over a one-year period, and, this number needs to be scaled down accordingly for shorter duration projects.

Costing of Consultancy Projects

The consultancy project costing is based on the following component charges (shown in Annexure-III):

Consultancy Fees (CF): There are no rigid norms for calculating the Consultancy fee. This depends upon several factors such as time spent, the importance of the advice and the experience of the faculty etc. For External Consultants, *the CF is limited to 20% of the project cost for Category T (testing projects) jobs*. The guidelines for calculating the consultancy charges are shown in Annexure-IIIA.

Charges for Personnel engaged in Technical Services (CPTS): This refers to the charges payable to the permanent employees of the Institute for their effort in the execution of the project. *The CPTS is limited to 30% of the project cost for Category T (testing projects) jobs*.

Project Staff Salaries (PSS): This refers to the salaries payable to temporary staff employed specifically for the project. The project shall also provide for 10% of PSS as House Rent Allowance (HRA).

Operational Expenses (OE): These include expenses incurred on consumables, contingencies, travel and daily allowance, honoraria for students and all other expenses related to the consultancy project. These also include **Equipment Utilisation Charges (EUC)** for the usage of institute equipment for all consultancy projects.

Capital Equipment (CE): This will include charges for the purchase of specific equipment for implementation of consultancy projects. **Overheads (OH)**: Overheads will be charged at the rate of 20% of CF, CPTS, PSS, OE and CE (see 2.9.1, 2.9.2, 2.9.3, 2.9.4 and 2.9.5 above) as applicable.

Contract Negotiation / Legal Expenses may be levied for projects involving contract negotiations.

Service tax and other taxes as applicable shall be provided for in the project cost. The details of the costing are given in Annexure IV. A sample costing is provided in Annexure IV.1.

Disbursement

The distribution of total money received from client will be as follows::

Consultancy work without use of Institute facilities: Total money received from client =

X1

Service tax = X2
Total Contracted amount, T = X1-X2 Total Expenditure on the project = E Remaining amount, Y = T-E Institute share = 0.20 Y
RDF = 0.10 Y
Savings, S = 0.70 Y
Amount S to be distributed to Investigators, technical and other staff on the recommendation of PI.

Consultancy work involving use of Institute facilities: Total money received from client =

X1

Service tax = X2
Total Contracted amount, T = X1-X2 Total Expenditure on the project = E Remaining amount, Y = T-E Institute share = 0.60 Y
RDF = 0.10 Y
Savings, S = 0.30 Y
Amount S to be distributed to Investigators, technical and other staff on the recommendation of PI.

In the case of short duration jobs entailing full advance payment, full disbursement to be made upon completion of the job and receipt of (i) a completion certificate from the project leader and (ii) the project completion report.

In the case of long duration jobs entailing advance payment of instalments linked to milestones, partial disbursements may be made; such disbursements will be linked to the phase-wise CPTS Charges and Consultant Fees as per estimates to be provided by the project leader and the phase-wise completion certificate.

A sample disbursement for consultancy project is provided in Annexure IV.2 and IV.3.

Research Development Fund (RDF)

The funds available in the RDF may be used to support the ongoing research, equipment maintenance, laboratory development etc. with the approval of Director (Research).

Review and other Related Matter of Consultancy Projects

It is essential to provide an effective framework to ensure smooth implementation of consultancy projects in the context of Educational, R&D and related activities. Also, Office of Research should be in possession of basic information in respect of consultancy activities to meet various proactive as well as reactive needs. To meet these requirements, the implementation needs to be within the framework given below:

Proposals for large sized consultancy assignments may be reviewed by a small standing committee, comprising a segment of the Research Advisory Committee.

A short report on every consultancy project, upon completion shall be submitted to the Director (Research) by the Consultant. The reports shall be preserved as 'Classified Documents' for a period of typically five years, to be destroyed thereafter.

Other Matters

Earnings for Technology Transfer, Revenue Sharing and Royalty will be governed by the Intellectual Property Policy of the Institute.

Notwithstanding the above, and keeping in mind the best interests of the Institute, consultancy may be taken up in exceptional cases, not covered by the above rules, with prior approval of the Vice-Chancellor.

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Annexure I

STANDARD TERMS AND CONDITIONS

1. **DECLARATION:** All work undertaken by HITS as part of the project will be in good faith and based on material / data / other relevant information given by the Client requesting for the work.

2. **CONFIDENTIALITY**: Due care will be taken by HITS to maintain confidentiality and discretion regarding confidential information received from the Client, including but not limited to results, reports and identity of the client.

3. **REPORTS**: Any test or other consultancy report given by HITS will be based on work performed according to available standards and / or open domain literature. In any event, this report may not be construed as a legal document, certificate or endorsement and may not be used for marketing of the products or processes, without prior consent from HITS. The institute reserves the right to retain one copy of the report and use the results of the project for its internal teaching and research purposes.

4. **WORK PERFORMANCE**: Every effort will be made to complete the specified work according to the planned time schedule. However, HITS will not be held responsible for delays caused beyond its reasonable control.

5. **CONFLICT OF INTEREST**: HITS may take up work for other clients also in the same area, provided, to the best of the institute's knowledge, there is no conflict of interest in undertaking such projects.

6. **PAYMENT**: The payment of consultation charges to HITS are to be made in advance and in full before the start of the project, through a demand draft / crossed valid cheque drawn in favour of The Registrar, HITS and sent to the Consultant or the address overleaf. The charges will also include any applicable tax as prescribed by the Government of India from time to time.

7. **TERMINATION**: The project work may be terminated by either party by giving the other party a notice period of 30 days. However, both parties will meet any residual obligations in connection with the project.

8. **LIABILITY**: HITS shall not be held liable for any loss, damage, delay or failure of performance, resulting directly or indirectly from any cause, which is beyond its reasonable control (Force Majeure). The liability of HITS shall be limited to the funds received for the project.

9. **INTELLECTUAL PROPERTY RIGHTS**: All rights pertaining to any intellectual property generated / created / invented in the due course of the project, will be the joint property of HITS and the Client. Terms and conditions regarding transferring / assigning / selling these rights to the client shall be governed by a separate written and agreed to document if required.

10. **RESOLUTION OF DISPUTES:** Any disputes arising out of the project shall be amicably settled by both the organizations. Any unsettled disputes may be subject to resolution as per the Indian Arbitration and Conciliation Act 1996.

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CENTRE RESEARCH AND CONSULTANCY

Annexure – II

Clearance Form
Principal Investigator *to whom correspondence will be sent.* **Students <u>cannot</u> be the first PI.**

Name (and title):	School or Unit:

Project type

(Please select one [x]) **sponsored: [ ]**	**Consultancy:** **[ ]**

Project details

Project Title:	
Proposed commencement date:	Proposed completion date:

Sponsored only:	Funding Body (e.g. DST etc.):	
	Scheme (e.g. Research and Development Grants):	
	Administering organisation: HITS [ ] Other [ ]*Please specify:*	

Consultancies	Client name:	
	Contact name:	Position:
	Address:	State:	Pincode:
	Email:	Phone:
	Who will be supplying the contract? determined **[ ]**	HITS **[ ]** Client **[ ]** To be

Other HITS researchers who have intellectual carriage and responsibility for this project

Name 2:	School or Unit:
Name 3:	School or Unit:
Name 4:	School or Unit:
Name 5:	School or Unit:
Name 6:	School or Unit:

Student/s involved

(Please select one [x]) **No: [ ] Yes [ ]** Name:
Type of involvement: Unpaid [ ]   Paid as casual from Research funds [ ] Scholarship paid from Research funds [ ]

Honorary/ies involved

(Please select one [x]) **No: [ ] Yes [ ]** Name:
Type of involvement: Unpaid [ ] Paid from Project funds [ ]

Equipment Utilisation Cost				
Sl. No.	**Equipment to be ulilised**	**Utilisation Cost (Rs.)#**		
		Cost per hr based on formula*	**Estimated no. of hrs.to be used**	**EUC Total**
Grand total				

10

CENTRE RESEARCH AND CONSULTANCY

Note:

> **#** only required for Consultancy Project. For sponsored project only
> specify the equipment to be provided by the Institute and the estimated
> no. of hrs. to be used.

*EUC – formula

$$\frac{EUC}{hr} = \frac{Market\ value\ of\ the\ equipment}{Life\ span\ (estimeted\ in\ hr.)} + \frac{operating cost}{hr}$$

Head of School (HOS)/Dean endorsement

I agree:

- that all project costs (direct and indirect) and all HITS cash and in-kind contributions have been correctly included
- to fund any shortfall in the project costs if the project costing is insufficient (consultancies/research contracts only)
- that the project can be accommodated within the general facilities in my School and sufficient working and office space will be available for staff
- I am prepared to have the project carried out in my School under the circumstances set out by the researcher/s
- I have noted the amount of time that the investigator/s will be devoting to the project and agree that it is appropriate to e xisting workloads
- I am satisfied that the project is adequately insured by the HITS insurance policy.
- I am satisfied that the Risk Assessment identified within this project will be appropriately managed during the course of the project
- I am aware of the Conflict of Interest policy and my responsibility in the process

HOD SIGNATURE AND NAME		DATE	
IF THE HOD IS THE PRINCIPAL INVESTIGATOR, ENDORSEMENT MUST BE MADE BY THE DEAN:			
DEAN SIGNATURE AND NAME		DATE	

Please scan and email this completed form and supporting documentation (application/proposal, budget) to:

Office of Research: Hindustan University, Padur.

CENTRE RESEARCH AND CONSULTANCY

Annexure III

Costing of Consultancy Project

1. Consultancy Fees (CF)*
2. Charges for Personnel engaged in Technical Services (CPTS)** (For permanent employees of the Institute)
3. Project Staff Salaries (PSS)
   (For temporary staff employed in the project)
4. House Rent Allowance (HRA)
   (Provision shall be made for 10% of PSS as HRA)
5. Operational Expenses (OE)
   (All other expenses related to the consultancy project which includes TA, DA)
6. Capital Equipment (CE)
   (Expenses towards purchase of capital equipment for the consultancy project)
7. Overheads (OH)
   (Charged at 20% of CF+CPTS+PSS+OE+CE)
8. Contract Negotiations / Legal expenses (CNL)
   (For projects involving contracts, agreements and MOUs, negotiation charges may be appropriately included by Director, Research)
9. Net Project Cost (items 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8)
10. Service Tax and other Taxes (as applicable)
11. Total Project Cost (9 + 10)
    One should include TA, DA for the visits to be made during the consultancy period in the operational expenses. A sample of the particulars to be considered is given below.

S.No	Particulars	No. of Visits	Days	Charges/Day	Total
	Travel				
	Accommodation				
	Food				

The Consultancy Fee for External Consultant will be limited to 20% of Net Project Cost in case of Category T (Testing) projects.

** *CPTS will be limited to 30% of Net Project Cost in case of Category T (Testing) projects.*

CENTRE RESEARCH AND CONSULTANCY

Annexure IIIA

Guidelines for calculation of Consultancy Charges

There is no fixed rule for fixing the Consultancy charges. It depends on the importance/ nature of the project. However, here some guidelines are given in fixing the consultancy charges. This charge has to be discussed with the agency to arrive at the final figure.

S.No	Name of theFaculty Member	No. of Working Days for Project	No. of Working Hours/Day	Percentage Contribution	Charges/Hour#	SubTotal
1.						
2.						
					Total Amount	

Charges hr = salary of the person/hr × factor

The factor may be ranging from 3 to 5 depending on the nature of consultancy.

CENTRE RESEARCH AND CONSULTANCY

Annexure IV

A Sample Costing for a Consultancy Project

A sample costing, disbursement, distribution of Deductions and
Overheads for aconsultancy project is shown in this Annexure.

IV.1 A sample costing for a consultancy project Head of expenditure (Amount.)

1. Consultancy Fees (CF) [#]
     Rs. 50,000

2. Charges for Personnel employed [##] in Technical Services (CPTS)
     Rs. 20,000

3. Project Staff Salary (PSS)
     Rs. 10,000

4. House Rent Allowance (HRA)
     Rs.
     1,000

5. Operational Expenses (OE)
     Rs.
     5,000

6. Capital Equipment (CE)
     0

7. Overheads (OH)
     Rs. 17,200

Contract / legal costs	Rs. ,000
Net project cost	Rs. 4,200
). Service Tax	Rs. 3,336
) be charged as per prevailing rate, in this example, say 8%)	
. **Total project cost**	**Rs. 2,536**

For External consultant, this will be limited to 20% of net project cost in case of testing projects.
For External consultant, this will be limited to 30% of net project cost in case of testing projects.

CENTRE RESEARCH AND CONSULTANCY

Disbursement for Consultancy work without use of Institute facilities:

Details	Amount in (Rs.)
Total money received from client	112,536
Service tax	8,336
Total Contracted amount, T	104,200
Total Expenditure on the project	37,000
Remaining amount, Y	67,200
Institute share	13,440
RDF	6,720
Savings	47,040

Disbursement of Consultancy work involving use of Institute facilities:

Details	Amount in (Rs.)
Total money received from client	112,536
Service tax	8,336
Total Contracted amount, T	104,200
Total Expenditure on the project	37,000
Remaining amount, Y	67,200
Institute share	40,320
RDF	6,720
Savings	20,160

Amount S to be distributed to Investigators, technical and other staff on the recommendation of PI.

Note: If service of External consultant is used then, 80% the amount budgeted for the External Consultant is to be paid to him and accounted as expenditure

Annexure V GUIDELINES FOR MoU/AGREEMENT

If a MoU/Agreement is required to be signed with the sponsor of a Consultancy Project, it should generally include the following clauses. Additional clauses may be added if considered necessary:

1. **General**
   This section should include the reference to the proposed Consultancy and identify the parties concerned pertaining to the MoU.

2. **Scope**
   This section should spell out briefly the nature of work, its limitations and expected end results.

3. **Time Frame**
   This clause must indicate the expected duration of the project and should also indicate the schedule of rview of progress, submission of reports etc., if any.

4. **Consultancy Charges**
   The document must clearly indicate the charges to be paid for the proposed Consultancy project along with amounts of bank draft(s) to be drawn in favour of the Institute. There should also be a mention of the service tax liability in this regard. Further, the schedule of payment should also be indicated in this clause.

5. **Responsibilities**
   This clause should define clearly the responsibilities of various parties with regard to making data and / or material available for the work as also for the return of the same, as and if applicable.

6. **Patents/Publications**
   The MoU should clearly spell out the arrangements proposed to be made with regard to any patents or publications arising out of the proposed Consultancy project.

7. **Force Majeure**
   This is an important clause and must be included to safeguard the interest of various parties due to one or more of the unforeseen force majeure events.

8. **Arbitration**
   The document shall provide for a suitable channel to settle any disputes or differences related to the execution of the Consultancy project which shall conform to the clause 10 of Annexure III.

9. **Liability**
   This clause should indicate the maximum liability which is to be accepted in the event of the project being terminated at any stage and shall be in conformity with clause 8 of Annexure III.

10. **Amendment to the MoU**

This clause should specify a provision for amendments to any one or more clauses of the MoU through mutual consent, at any stage during work of the project, due to any reason whatsoever.

The MoU/Agreement's legal vetting by the Institute's Legal Officer is necessary and will be the responsibility of the PI concerned.

2.0 Guidelines for Sponsored Research

INTRODUCTION

The Hindustan Institute of Technology & Science (HITS) has been interacting with industries, research organizations and governmental agencies for taking up consultancy and sponsored research projects. These are either referred to the Institute or are sanctioned based on specific project proposals submitted by the faculty members. Such projects pose considerable scientific, technological and academic challenge to the faculty and students of our Institute. Further the academic programmes of the Institute are strengthened by such active interaction with the industries.

These projects and assignments require a great amount of scientific and technical input from the faculty and staff of the Institute. They have given an opportunity for the Institute staff to work on live problems of immediate relevance to the country. The students can also be trained to tackle such practical problems. Equally important is the fact that the knowledge and expertise of the Institute staff are available for solving some of the pressing technological problems facing the industry and the nation. These interactions of the Institute are implemented and coordinated by the office of Department of Research.

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These are R & D projects sponsored by Government agencies, industries or other institutions with a view to generate new knowledge, to develop a new technological process or to create new products. Considerable amount of studies and research/development work may have to be put in by the investigators to solve the problem and as such these projects are considered as R & D projects. These are long term assignments in emerging areas and in highly specialized fields of Science and Technology.

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Projects that can be executed and problems that can be solved readily, utilising the professional knowledge and expertise of the staff are classified as consultancy

assignments. The Institute facilities may be used for research work, theoretical analysis or experimentation required for generating sufficient information and datafor this problem solving operation, but these assignments are heavily dependent onthe existing know-how and skill of the staff concerned. These are mostly related to the application of an already known technology.

The procedures to be followed for undertaking Sponsored Research projects, the administrative controls exercised and the remunerations and incentives given to thestaff for undertaking such inter institutional projects are described here.

SPONSOREDRESEARCH

A sponsored research project may be initiated either by the faculty member of the Institute submitting a proposal to the sponsoring agency or by a client institution orindustry seeking the help of the Institute. The sponsored programme can be taken individually by individual faculty/academic staff or collectively by a group of investigators. One of the investigators must be the principal investigator (PI) while others are the principal co-investigators. Funding agencies generally prefer to have a co-investigator (Co-PI) who can take the place of the principal investigator in case the latter goes on leave or resigns. Projects funded either by the Ministry of Human Resource Development, Council for Scientific and Industrial Research etc. are also governed by separate rules for specific classes.

How to Apply

Project proposals are generally made by the faculty/academic staff for submission to the funding agencies for their approval and sponsorship. Proposals are to be prepared in the standard format(s) prescribed by the funding agency to whom the proposal will be submitted. Apart from the objectives, proposal will contain provisions for all anticipated expenses relating to staff, equipment, materials, travel and contingencies. ***An Institute overhead equal to 20% of the total cost of the project is to be included in the proposals*** (Please note that as per DST rules, the maximum amount for overhead is limited to Rs. 5, 00,000.00).

In the case of sponsored projects the faculty member who has less than two years only for superannuation at the time of submitting the project proposal should include another faculty member with a longer service by at least one more year, as a Co-Investigator.

A form (as shown in Annexure –I) is also to be filled in giving the details of the infrastructural facilities to be provided by the Institute. The proposal together with the details of infrastructure required from the Department duly forwarded / approved by the Head of the Department(s) / Centre(s) is to be submitted to the Director, Research. The Director after the scrutiny of the project proposal and the Institute's commitments with respect to the infrastructure facilities, issues on behalf of the Vice-Chancellor, a Certificate

for the Institute's willingness to extend support for the project utilizing the Institute's facilities.

Proposals will have to be presented before a committee constituted by the Vice-Chancellor. After approval of the committee, the proposal can then be forwarded to the sponsoring agency.

Initial Steps

Project Identification Number:

As soon as the project sanction is communicated to the Institute by the funding agency, the Department of Research assigns a project number, which is used in all correspondences within the Institute. This helps to identify the project and to facilitate the correct booking of the expenses.

Opening Bank Account

A current account is to be opened for the project which will be operated jointly by PI and Director, Research. This account number may to communicate to the funding agency so that the money can be deposited directly to this account.

Date of Commencement:

The date of commencement of the project; is the date of receipt of the first instalment of the project fund from the funding agency or the date of approval of the project/date of joining of the staff, whichever is acceptable to the funding agency.

Recruitment of Project Staff

The Department of Research helps the PIs to recruit the various category of staff required for the project. The procedure to be followed for the recruitment of each category of staff is given below:

Staff appointed through regular selection

Appointments can be made through campus announcement/advertisements in news papers (if sufficient funds are available) and through circulation to other Institutions.

Annexure II contains the various category of project posts, their consolidated pay and the minimum qualifications required for each post. Additional desirable qualification and experience can also be prescribed in the advertisement. If suitablecandidates are not available, the post can be filled by appointing a lower category of staff.

The following step by step procedure is followed for the recruitment of staff:

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In the case of selection process the PI has to send a request to Department ofResearch for recruitment of staff giving the minimum qualifications and experience, desirable qualification, duration of the appointment etc.

Department of Research issues the advertisement/announcement on the request of the co-ordinators as per the prescribed norms for which the expenditure if any will be debited to the project contingencies.

Applications from candidates including their bio-data on plain paper are received directly by the PI.

Applications are processed and short-listed by the PI and then sent to the Research office with their recommendations for scrutiny and approval.

Director, Research constitutes a Selection Committee and intimates it to the PI.

The PI, in consultation with the Chairman and members of the Selection Committee has to fix a date and venue for the interview and also to take action for calling candidates for interview.

Trade tests if any and the Selection Interview are to be organised by the PI inconsultation with the Chairman and Selection Committee Members.

Bio-Data of the candidate in the prescribed form to be obtained and certificates verified before the commencement of interview.

Depending upon the availability of funds, the coordinator can decide about paying travel fare by Sleeper class train/bus journey to the outstation candidates.

The proceedings of the Selection Committee meeting prepared in the standard format provided by the Research office have to be sent to the Director, Research, for getting approval of the Vice-Chancellor and Director(AV) along with other papers as per the check list.

On approval by the Vice-Chancellor and Director (AV), HRD, HITS issues an offer of appointment to the selected candidate(s).

Appointments are initially made for one year duration which can be extended for the full duration of the project depending on the performance ofthe candidate. The total duration a project staff member can be engaged in one or more projects should not exceed five years.

The candidate selected shall register for Ph.D. / M.S. (By Research) programme of this University.

Staff appointed on ad-hoc basis

Staff can be appointed on ad-hoc basis at any time of the project.Application(s), to be made by the candidates for ad-hoc appointments includingpart-time employment are in the standard format. This application with the recommended salary is forwarded by the PI to the HRD through Director, Research who will appoint the staff on the advice of a committee. The committee meets every month. The candidate can be given a consolidated salary commensurate with his/her qualification and experience, conforming to the designation of the project posts.

Appointments through Ph.D./M.S. interviews

Appointments can also be made through Ph.D./M.S. interviews. Prior approval is to be taken from the Director, Research. Requests for approval have to be sent through the Head of the Department. The Selection committee recommendations (extracts) along with the application/ Biodata of the candidateto be sent to Research Office.

Part-time Employment

Staff can also be appointed on part-time basis, with the salary being fixed in proportion to the actual duration of work in a day

Duration of appointment

On adhoc basis for five months with 10 days break extendable upto 5 years. However staff appointed as Senior Project Officer, Project Associate can be appointed for one year and their services extended for another year without break in service.

Students employed on Part-time basis

Facility exists to utilize students for specific works in projects. Students registered through other categories such as through project for M.S/Ph.D. are not eligible for remuneration.

Application for part time employment of students in sponsored projects for U.G/P.G students:

Remuneration rate has to be fixed by the concerned coordinator at the rate between Rs.50/- and Rs.100/- per hour.

During the Academic session, only part-time engagement is allowed. Such part-time engagement should not exceed a maximum period of 40 hrs per month. During vacation period this is 120 hrs per month.

The payment shall be only for the duration for which the student has actuallyworked. The payment is made based on the certification given by the co- ordinator.

All part-time payments will be only for the duration of the project. The part- time payments have to be made within two months of completion of the work by the students from the contingency head of the projects.

The payments can only be made from the contingency fund is available of the project.

Project Staff Administration

The following procedure will apply with regard to the administration of staff recruited on selection or ad-hoc basis.

The Project staff will work directly under the supervision of the PI. Their attendance and punctuality in work, the allocation of duties are all made by the PI.

The personal files of the project staff will be maintained by the PI.

The project staffs are eligible for Leave as mentioned in Annexure II.

Project Staff are eligible only for the consolidated salary as mentioned in Annexure II and not eligible for any other benefits.

Leave can be approved by the PI. But if the leave exceeds the permitted level, it will be treated as leave without pay. This is to be approved by the Director, Research.

The female staffs appointed through selection process are eligible for Maternity Leave as per Institute's rules.

The transfer of project staff from one project to another is not permissible. They can be appointed again only through a fresh appointment process.

The project staff must be advised to give sufficient notice well in advance before they leave the project.

The salary of the last month in service will not be distributed until a no-dues certificate in the prescribed form is received from the coordinator by Research office. The staffs have to surrender ID card at the time of relieving.

Care must be taken by the PI to see that the staff members are not engaged beyond the duration of appointment or the closing date of the project.

Administrative Support by Research Office

The Institute provides the following administrative support and accountingfacilities for carrying out the sponsored research projects:

The Director, Research sanctions expenditure, recruitment of staff and distribution of honorarium to the PI and Institute staff.

For purchase of material and equipments the Institute rules shall apply.

Temporary advance up to Rs. 10000/- is sanctioned by the Director, Research for minor purchases and incidental expenses. The PIs mustsettle these accounts within one month from the drawal of advance.

An imprest amount subject to a maximum of Rs. 5000/- per project is sanctioned by the Director, Research on the request of the PI. This can beoperated by the PI / CI. The imprest can be utilised for petty purchases, contingencies etc. and should be chargeable to sub heads like consumables or contingencies only and the specific sub head should be indicated in the recoupment account. The imprest can be periodically recouped by giving the up-to-date statement of accounts along with allthe bills and vouchers duly certified. The accounts can be directly settled with the Accounts Section with a copy to Research Office.

Project Accounts

The project account shall be maintained by the PI/ Research Office. The expenditure can be incurred only as per the head of sanction. Any deviation or re-appropriation is possible only with the prior approval of sponsoring agency. Funds also cannot be diverted, for creating the infrastructural facilities without the approval of the funding agency.

Whenever funds are to be claimed from the funding agency or bills to be sent against sanction, the same is sent to sponsoring agency by the PI through the Accounts Section with intimation to Research Office. For release of grants in subsequent years also, the Accounts Section may be approached for necessary statement of Accounts (Provisional or audited asthe case may be) and for utilization certificates. Release of grants at the right time is to be ensured by the PI, as deficits in projects will affect the progress of the project.

All reimbursements to the Project Investigators and Consultants may be made to the Bank account with intimation to the coordinator concerned through e-mail. The Investigators / Consultants shall indicate their e-mail ID and project account in the form of seeking reimbursement.

All bills and invoices for payment against purchase order are to be sent to the Accounts Section for settlement with a copy to the Research Office.

All bills duly certified with all the particulars, towards hiring of taxis, purchase of books, entertainment, subcontracting, travel expenditure of visitors etc. must be sent to the Research office.

The accounts of the project will be audited every year. Audited Statement of Account and Utilization Certificates will be sent to the sponsors by PI under intimation to the Research Office. If, however, provisional statement of Account is required for claiming funds from sponsor, Registrar may be approached for the same.

Incentives to the PIs

The management based on their discretion, may provide one time incentive to the investigators based on the value of the project.

The Project Investigators (PIs) can attend Conferences/Seminars workshops in related areas utilizing the project grants. There is no ceiling for registration fee for attending National or International Conference heldin India or abroad. Specific approval of the funding agency to utilize the grants for travel abroad is to be obtained.

Health Insurance coverage, during visits abroad and personal accident insurance for both PI and project staff on work relating to projects is permitted.

Travel

The PIs/Consultants are permitted to be away on duty, as required for project work. Prior permission of the Director, Research in prescribed form sent through the Head of the Department / Centre, must be obtained for all such travels.

The staff member who will be undertaking the travel has to fill up the approval form. PI and Head of Department / Centre have to countersign the form. This is forwarded to the Director, Research for approval. Care must be taken by the PI that the total expenditure for travel does not exceed the amount allotted for the purpose. The final TA bill after performing the journey has to be forwarded to the Accounts Sectiondirectly.

International travel in projects can be permitted only with the concurrence of the Sponsoring Agency.

The visits abroad by the Project Investigators require a certification by Director, Research that they have made alternate arrangements for carrying out the projects during their absence. Therefore the PIs are to take note of the following, before sending the request to Director, Research.

In case there is more than one investigator, the remaining investigator(s) should give their written concurrence that they will carry out the project during the absence of the one of the investigators.

The client shall meet all the travel, boarding and incidental expenses of the travel undertaken for the work. This should be specified and included in the estimated cost of the project.

TA and DA may be reimbursed on presentation of certified bill as per Institute's norms.

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Project staff on tour can be reimbursed boarding and lodging expenses, onproduction of certified bills as per Institute's norms.

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Annexure – I

Research Clearance Form

Principal Investigator *to whom correspondence will be sent.* **Students <u>cannot</u> be the first PI.**		
Name (and title):		**School or Unit:**

Project type		
(Please select one [x]) **sponsored: [ ]**		**Consultancy: [ ]**

Project details		
Project Title:		
Proposed commencement date:		**Proposed completion date:**
Sponsored only:	Funding Body (e.g. DST etc.):	
	Scheme (e.g. Research and Development Grants):	
	Administering organisation: HITS [ ] Other [ ] *Please specify:*	
Consultancies	Client name:	
	Contact name:	Position:
	Address:	State: Pincode:
	Email:	Phone:
	Who will be supplying the contract? HITS **[ ]** Client **[ ]** To be determined **[**	

Other HITS researchers who have intellectual carriage and responsibility for this project	
Name 2:	**School or Unit:**
Name 3:	**School or Unit:**
Name 4:	**School or Unit:**
Name 5:	**School or Unit:**
Name 6:	**School or Unit:**

Student/s involved
(Please select one [x]) **No: [ ] Yes [ ]** Name:
Type of involvement: Unpaid [ ] Paid as casual from Research funds [ ] Scholarship paidfrom Research funds [ ]

Honorary/ies involved
(Please select one [x]) **No: [ ] Yes [ ]** Name:
Type of involvement: Unpaid [ ] Paid from Project funds []

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Equipment Utilisation Cost				
Sl. No.	**Equipment to be utilised**	**Utilisation Cost (Rs.)#**		
		Cost per hr based on formula*	**Estimated no. of hrs. to be used**	**EUC Total**
Grand total				

Note:

only required for Consultancy Project. For sponsored project only specify the equipment to beprovided by the Institute and the estimated no. of hrs. to be used.

*EUC – formula

$$\frac{EUC}{hr} = \frac{Market\ value\ of\ the\ equipment}{Life\ span\ (estimeted\ in\ hr.)} + \frac{operatingcost}{hr}$$

Financial information	
Direct project costs	
Indirect project costs **+**	
PI/School/Institute/Centre bonus (consultancies only): **+**	
Total project cost payable by the funding body (excl GST) =	
In-kind contribution (if applicable)	
HITS cash contribution (if applicable)	
Third party payments	
Are any project funds to be paid/sub-contracted to a third party? **No: [ ] Yes [ ]** Name:	
Credit split *This will determine how block funding will be distributed between multiple*	
Organisational Unit 1:	**% split:**
Organisational Unit 2:	**% split:**
Organisational Unit 3:	**% split:**

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Intellectual property	
The project results will be owned by (if known):	**[ ]HITS**
	[ ]Funding body Does HITS wish to have the right to use the project results for teaching, research publications or other purposes? Yes [ ] No [ ]
	[ ] HITS & funding body
The project utilises background/exi sting IP developed by:	**HITS:** No [ ] Yes [ ]**Does HITS have a licence to use Yes [ ] No [ ] it?
	Funding body No [ ] Yes [ ]**Does HITS have a licence to use Yes [ ] No [ ] it?
	A third party No [ ] Yes [ ]**Does HITS have a licence to use it?

Location
Will any of the project work be conducted on premises/land owned by a third party? Yes [ ] No [ ]

Principal Investigator (PI) endorsement
Has a Risk Assessment been undertaken?Yes **[ ]** No **[ ]**
I am satisfied that the risks identified within this project will be appropriately managed.   Yes **[ ]**   No **[ ]**
Is the project covered by HITS insurance?Yes **[ ]** No **[ ]**
Is there, or could there be a potentialconflict of interest? Yes **[ ]** Please specify below: No **[ ]**   Unsure **[ ]**   *(Attach further detail)*

PI SIGNATURE & NAME		DATE	

Head of School (HOS)/Dean endorsement

I agree:

- that all project costs (direct and indirect) and all HITS cash and in-kind contributions have been correctlyincluded
- to fund any shortfall in the project costs if the project costing is insufficient (consultancies/researchcontracts only)
- that the project can be accommodated within the general facilities in my School and sufficient working andoffice space will be available for staff
- I am prepared to have the project carried out in my School under the circumstances set out by theresearcher/s
- I have noted the amount of time that the investigator/s will be devoting to the project and agree that it isappropriate to existing workloads
- I am satisfied that the project is adequately insured by the HITS insurance policy.
- I am satisfied that the Risk Assessment identified within this project will be appropriately managed duringthe course of the project
- I am aware of the Conflict of Interest policy and my responsibility in the process

HOD SIGNATURE AND NAME		DATE	
IF THE HOD IS THE PRINCIPAL INVESTIGATOR, ENDORSEMENT MUST BE MADE BY THEDEAN:			
DEAN SIGNATURE AND NAME		DATE	

Please scan and email this completed form and supporting documentation (application/proposal, budget) to:

Office of Research: Hindustan University, Padur.

Annexure- II

Guidelines for Fellowship for amount for Research personnel employed in R&D program#

Junior Research Fellowship (JRF)/ Senior Research Fellowship (SRF)

Sl.No.	Designation & Qualification	Emoluments per month for first 2 years	Emoluments per month after 2 years/SRF
1.	JRF leading to Ph.D. PG degree in Basic Sciences andNET qualified Or Graduate degree in Professional courses and GATE or equivalent qualification	Rs. 16000/-	Rs. 18000/-
2.	JRF leading to Ph.D. PG degree in Professional courses	Rs. 18000/-	Rs. 20000/-

Doctorate or equivalent degree of having 3 years of research, teaching anddesign and development experience after ME/MTech

Sl. No.	Category	Emoluments per month
1.	Research Associate I (RA I)	Rs. 22000/-
2.	Research Associate II (RA II)	Rs. 23000/-
3.	Research Associate III (RA III)	Rs. 24000/-
The stipend of Research Fellow/associate is exempt from the payment of Income Tax under 10(16) of IT Act, 1961.		

Service Conditions

1. **DA and CCA:** JRFs, SRFs and Research Associates will not be entitled to these allowances.
2. **HRA:** All research fellows may be provided with either hostel accommodation or 10%HRA. The fellowship amount may be taken as basic for HRA calculation.
3. **Medical Benefits:** The research fellows will be entitled for medical allowance as perInstitute norms from time to time.
4. **Leave rules:** The JRFs/SRFs are eligible only for casual leaves, while the ResearchAssociates are entitled for leave as per Institute rules.
5. The research fellows are not eligible for other benefits like bonus, retirement

benefits etc.

6. **# Note:** This is only a guideline. Please refer to the guidelines of the corresponding sponsoringagency for fixing the fellowship amount.

3. INTERNALLY-FUNDED RESEARCH PROJECTS

Introduction

The University's Centre for Research and Consultancy (CRC) is a service unit under the Office of the Director (Research). It provides valuable support in fulfilling the University's Vision-Mission through its programs and services. CRC promotes and nurtures a culture of genuine intellectual inquiry, advances inter-and multi-disciplinary studies, and serves as a clearinghouse for information related to faculty research activities on campus, among others, in support of this Vision-Mission.

Its Programs and Services

- administers the Academic Research Program
- monitors externally-funded projects under taken by the different departments and research centers
- disseminates salient findings of completed researches
- provides project development and implementation assistance
- documents and assists in the formulation, review, and amendment of guidelines and policies governing research in the University

Internal Funding for Research Projects

The University provides funds to the faculty for carrying out research or development projects. The results of these Projects may form the basis for applying Funded Research projects. These Projects may be basic or applied.

Basic Requirements/Conditions

Faculty Qualification

1. Research grants are awarded to academic teaching full time and part time faculty members. Priority is given to full-time faculty members.
2. Upon the recommendation of their respective DEAN/HOD, full time faculty members may qualify as investigator and co-investigator of research projects.
3. Visiting or exchange faculty members with research experience may qualify as investigator, but the duration of the grant should not go beyond the term of their appointment.
4. Retiring faculty members with research experience may qualify as investigator, but the duration of the grant should not go beyond the date of their appointment.

Types of Research Proposals

Basic/Applied Research

Basic or fundamental research involves experimental or theoretical work undertaken to acquire new knowledge without particular or specific application in use.

Applied research involves an original investigation undertaken to acquire new knowledge toward a specific practical aim or objective.

Experimental Development Project

Experimental Development project refers to systematic work that draws from existing knowledge gained from research and/ or practical experience that is directed to produce new materials, products and devices, install new processes, systems and services, and substantially improve those already produced or installed**.**

Submission of Proposals

1. Research proposal application can be submitted throughout the year in research office after getting approval from respective HOD/DEAN.
2. Project submission application should have complete details of project idea. Project methodology, project duration and fund requirement details.

General Guidelines & Policies

Evaluation Criteria of Project Proposals

A project may be approved if:

- The project will result in publishable/patentable research output.
- The project will make an impact on and contribution to education in the University.
- New knowledge will be produced and contribute to different field/areas of specialization.
- The investigator should have the capability to undertake and complete a research project
- If a investigator has an ongoing project, and he/she proposes a new one, approval of the new project will be deferred until the time that the earlier project is completed.
- An investigator is granted only one internally-funded project at one time.

Monitoring of Research Budget

- No disbursement of funds in excess of the approved budget is allowed. However, those with exceptional cases may file a request for additional funds to the University through the Director (Research).
- Funds approved for one project may not be allocated for another project.
- Fund disbursement is subject to the prompt submission of progress reports, mid-term report, and/or settlement of previous cash advances.
- Settlement should be supported by acceptable cash invoices/original official receipts.
- Checks for project equipment /supplies must be submitted with a corresponding Materials Requisition Form signed by the Principal Investigator, countersigned by HOD / Dean and Director (Research).
- Cash advances for up to 20% of the approved budget may be requested for materials and supplies. Generally, all cash advances should be settled within 15 days.

Monitoring of Research Progress

- A progress report, mid-term report, final, and revised report has to be submitted to the Research office
- Faculty investigators are required, where applicable, to attachphotos/pictures of research activities to the progress report.
- Submission of a progress report and mid-term report are prerequisite tothe subsequent release of funds.
- Copy of the final report should be submitted to Research Office.
- Faculty investigator is required to submit research outputs in publishable form.
- An investigator handling project should submit a final report different from the student's thesis.
- The research investigator is expected to complete the research project according to the terms approved by the University. The investigator is not allowed to transfer the project to another faculty member without proper approval.
- Long overdue projects (i.e. projects that exceed the maximum deadline of project completion) will be reviewed by management.
- For projects with more than one investigator, the role and output of each investigator should be clearly identified in the proposal stage.

- In cases where the co-investigator has retired, has resigned, goes on study leave, themain investigator will take over the project and see to its completion.

- The Principal Investigator has to complete the research project within the allowableperiod.

Extension of Projects:
- Normally the Projects are expected to be completed as projected. With regard to requestsfor additional funds/extension of deadlines/changes in the project proposals:

- Requests for extension of deadlines or additional funds are discouraged

- The Investigator need to request for additional funds or an extension of the project deadline, this should be done in writing and addressed to the Director (Research). Supporting documents should be attached.

- Requests for extension of deadlines should always be accompanied by a current status report.

- The Research office along with respective DEAN/HOD evaluates requests for changes in project duration and fund allotment.

Evaluation of Final Reports

- All final reports of research projects are evaluated by experts in the field.

- Reports for publication are presented to research office by theinvestigator.

Completion of Research Project

- A project is considered provisionally complete upon acceptance of theevaluator of the final report/research output (with or without revisions).A project is considered complete upon compliance with the above provision and submission of the following requirements:

- Project report duly signed by the investigator/co-investigator, by respective DEAN and HOD.

- Hardcopy and electronic copy of the report/publication on CD.
- Complete report of fund used for the project.

Dissemination of Research Output

Upon completion of the project, the investigator shall disseminate his/her research findings to his/her department, or he/she is invited to present his/her study through the University Research Office.

Publication of Internally-Funded Research Projects

- Investigator who has completed his/her research project isencouraged to publish his/her work.

- Proper acknowledgement of the grant should be made in anypublication of the report.

- All intellectual properties of internally funded projects shall be governed bythe Intellectual Property (IP) policy of the university.

4.0 POLICIES AND GUIDELINES FOR ESTABLISHMENT OF RESEARCH CENTRE

PURPOSE

The purpose of this policy is to provide direction: to those seeking university approval for the establishment of Research Centres; and on the review of the performance of Research Centres

SCOPE

This policy applies to the establishment and governance of Research Centres at Hindustan Institute of Engineering and Technology.

POLICY

- The Hindustan Institute of Engineering and Technology encourages the establishment of Research Centres at various levels of the organization that will enhance and facilitate disciplinary and interdisciplinary research collaboration, knowledge transfer and training. Faculty may be involved in one or more of the projects in a Research Centre and be active in more than one Research Centre.
- The university is committed to develop and maintain high-quality programs of research.
- The university encourages to have inter or multi-disciplinary faculty in the Centre
- Intra-disciplinary - membership and activities normally within a single department, a non-departmentalized Faculty, or between departments in a single faculty
- Inter-disciplinary - membership and activities normally between 2 departments
- Multi-disciplinary - membership and activities normally between 3 or more department
- Inter-institutional - membership and activities between multiple universities
- Objectives of Research Centers

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The purposes of establishing a Research Centre are to:

➢ Promote and facilitate collaborative and/or interdisciplinary research and enhancement of research networking capacity and infrastructure.

➢ Increase and effectively manage the resources and research support for its members and the wideruniversity community.

➢ Provide education and training in research and related skills, especially for graduate and undergraduate students and thereby enhance the academic programs of their constituent academicunits.

➢ Contribute to the university's strategic educational and research missions and to support synergiesbetween research, teaching and learning.

➢ Transfer and mobilize knowledge gained through research for the benefit of society, via a variety of mechanisms as appropriate.

➢ Enhance the reputation of its members, the constituent academic units, and the university through the quality of its work.

➢ Research Centres are expected to develop their own objectives and measurable goals to meet the purposes stated in this policy. The Research Centre's objectives and goals should be consistent with the proportionate approach taken toward its establishment.

Approval, Governance of Research Centers

Research Centers are constituted formally as part of the university's organization and are subject to its direction, oversight, and strategic plans.

Research Centers and their constituent academic units are expected to establish mechanisms to assure there is ongoing communication for purposes of coordinating resources, training, research activities, andstrategic planning

Administrative and Financial Structure of Research Centers

A Research Centre will normally be led by a faculty member of the university. Funding for ResearchCenters can be made up of a combination of multiple internal and external sources including but notlimited to: external funding agreements, academic unit operating funds, non-recurring funds, indirectfunding, and endowments. Funding sources may change and adapt over time.

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1.   Proposal Format – Research Centre

Proposed Center Name

———

Funding agency sponsoring the center (if any):

———

Each Center proposal must provide sufficient information to the following questions before consideration.

1.   General

1.1   Title of proposed Centre

1.2   Name(s) of proposer(s)

1.3   Department(s)

1.4   Names of at least two Departmental Conveners who support the proposal.

1.5   Proposed "parent" Department for the Centre.

2.   Objectives

2.1   What are the distinctive characteristics of the center? Describe its purpose and function.

2.2   What is the vision and/or mission of the center and how does it connect to the overalluniversity vision and mission statements?

2.3   What are the goals/outcomes for this center?

3.   Context

3.1   Has an informal structure been in existence before now, or does this proposal represent anew departure for the proposer(s)?

3.2   What comparable Centres exist elsewhere? Provide a summary of their objectives.

3.3   What "added value" will the proposed Centre bring to the research community

4   Centre structure

4.1   Who will be the Centre head? What are his/her qualifications for the role?

4.2   What management structure is proposed?

4.3   Will additional staff need to be hired to sufficiently operate the center? If so, has this beenworked into the overall budget process for your school?

5   Resources Required

5.1   What is the approximate cost estimated in order to start and operate this center each year?

5.2   How will this center be funded?

5.3   Will the center collaborate with anyone outside of the university in order to support/operate thecenter? If so, who? If appropriate, has a memo of understanding been drafted between Hindustan University and this outside entity?

5.4   What additional resources, without which the Centre could not operate effectively, are requiredfrom the School?

5.5   Will the center have a physical location, If so, where will it be located?

5.6   How long do you anticipate the need or operation of this center?

6   Resources Available

6.1How is overall effectiveness of the center going to be evaluated? How often?

6.2 Will the establishment of this center affect enrollment for any of the schools at our
     University?If so, how?

6.3 Are there any accreditation issues that need to be addressed for the
     establishment andmaintenance of this center?

5.0 POLICY FOR APPOINTING ADJUNCT FACULTY

Introduction:

To foster better interactions between Hindustan University and R&D Organizations, National Laboratories, Centres of Excellence and Industrial R&D Laboratories, it is proposed that the Faculty / Scientists of the above Institutions be appointed as Adjunct Faculty. This will help the University to utilize the domain knowledge &experience in certain specialized areas of these faculty / scientists which is not available in the University. This is also aimed at providing opportunity for research scholars to work in frontier areas in which the R&D Organizations and Industry are interested. This will also help solving the problem of non-availability of Research Supervisors in certain specialized areas.

Objectives:

i) To improve academic environment in the University by promoting collaboration and formal linkages with other Universities, R&D Laboratories & Industry.

ii) To encourage non-university Institutions to benefit from expertise in the University system.

Scheme:

The Scheme aims to appoint Adjunct Faculty from

iii) Institutions of National Importance,Inter University Centres and NationalFacilities.

iv) National Laboratories, Autonomous Academic Institutions and R&DOrganizations.

v) Industrial R&D Laboratories.

vi) Faculty of Universities of repute and Scientists of R & D organizationsabroad.

Eligibility:

a. A Faculty from other Universities who is actively engaged in researchevidenced by quality publications during the last five years.

b. A Scientist from National Institutions, National Laboratories & R&DOrganizations.

c. A person working in Industry with evidence of research experience.

Memorandum of Understanding (MoU):

A MoU may be signed between the HU and collaborating organizations for a period as may be agreed to, spelling out the modalities for the appointment, remuneration and facilities to be provided by the HU.

CENTRE RESEARCH AND CONSULTANCY

Monitoring:

HU will develop a transparent mechanism to monitor the outcome of the activities of the Adjunct Faculty.

Responsibilities:

The Adjunct faculty will be recognized as Supervisors for research fellows and they have to handle one subject. The Adjunct faculty from Abroad shall spend 2to 4 weeks in HU and handle a course in the area of their specialization.

Remuneration:

- The Adjunct faculty will be recognized as Supervisors for research fellows andthey have to handle one subject.

- Adjunct Faculty shall receive Rs.1.00 Lakh or 2000 – 2500 $ per Visit if they spend 4 weeks in the University.

- They shall make atleast one visit per year.

- They will be provided with free Guest House Accommodation and freeBoarding.

6.0 INTELLECTUAL PROPERTY POLICY

OBJECTIVES:

The current and stated Intellectual Property (IP) Policy of the Hindustan Institute of Technology and Science (HITS) aims to facilitate the protection of intellectual property generated during scientific pursuit in the Institute and offers scope for wealth generation, alleviation of human sufferings and betterment of human life. HITS urges all faculty, staff and students to document their IP, so that it could be protected and applied to the gain of the country, the institute and the concerned inventors. HITS is keen to facilitate faculties and staff of HITS in a proactive manner in the generation, protection and transaction of Intellectual Property which offer potential and scope for shared benefit*s* to both institute and inventors. Through this policy, a system will be in place to bring order into the process of knowledge generation and commercial exploitation.

FOR WHOM IS THIS MEANT?

This policy covers all staff, faculty members, students and also persons engaged in sponsored schemes and projects/consultancy and any other initiatives of the Institute as well as visiting scientists/professors/personnel who participate in the research work being carried out at the Institute.

WHAT CONSTITUTES INTELLECTUAL PROPERTY?

Intellectual Property (IP) is an intangible knowledge product resulting from the intellectual output of the inventors, namely faculty, staff and students of the Institute. IP thus is an outcome of in-house or sponsored research, industrial consulting or other forms of collaborative R & D.

Any product of the human intellect which is unique, novel and unobvious and which qualifies for protection under relevant acts of the Government governing patent,copy right etc. and developed at HITS belongs to the Institute. IP can be of the following forms: know-how, and other proprietary concepts, solutions, processes, including an invention, scientific or technological development, and even computer software, genetically engineered microorganisms and business models and other forms as the need arises.

The above forms of IP can be protected, under domestic and international patent office, if protection of IP is seen necessary both by the Inventor and the Institute. It can then be protected within the country or abroad. The office of the Intellectual

Property Cell (**I**P Cell**)** deals with all activities relating to Intellectual Property of the Institute.

The product of the intellect can have potential for faculty entrepreneurship. Such activities will ensure that the intangible IP reaches a tangible form that can be marketed. When this is the case, the Guidelines for Faculty Entrepreneurship shall be followed. The office of Entrepreneurship Development Cell handles all activities related to entrepreneurship of any faculty.

OWNERSHIP:

IN-HOUSE RESEARCH:

All rights in respect of investigations carried out at the Institute shall vest in and be the absolute property of the Institute and inventor(s) except in respect of the activities carried out jointly with other institutions or agencies or under a sponsorshipby an agency, in which case the ownership will be decided and agreed uponmutually.

SPONSORED RESEARCH:

Intellectual Property Rights (IPR) of inventions arising out of research projects undertaken on behalf of the sponsoring agencies shall be taken jointly in the nameof the Institute and sponsoring agencies; when the sponsoring agencies bear the cost of filing and maintaining of the IPR or as agreed upon mutually. If the sponsoring agencies are not forthcoming, the Institute at its discretion may file the application with absolute ownership and Institute will meet the entire cost of filingand protection of IPR.

COLLABORATIVE RESEARCH:

All intellectual property jointly created, authored, discovered, invented, conceived or reduced to practice during the course of collaborative research undertaken jointly by Institute with Collaborating Institutions, shall be jointly owned; and the Collaborating Institutions will be requested to bear the cost of filing and maintenance of the IPR. Incase the Collaborating Institutions are not forthcoming to bear fully the cost of filing and maintenance, if considered expedient by the Institute, the Institute will share the cost equitably with the Collaborating Institutions. Where the Collaborating Institutionsare not forthcoming for filing joint IPR application, the Institute at its discretion may file the application with absolute ownership and Institute will meet the entire cost of filing and protection of IPR.

COPYRIGHT:

HITS shall be the owner of work, including software created by HITS personnelwith significant use of HITS resources.

If the institute foresees a gainful return from copyrights, it may initiate steps to file and protect such copyrights and share the financial benefits with the inventor on terms and conditions of the institute.

HITS shall be the owner of copyright on all teaching material developed by HITS

personnel as part of any of the academic programmes at HITS. The authors shall have the right to use the non-funded technical material in his/her professional capacity. If the technical material is prepared by the author on behalf of a funding agency, then the copyright will be equally shared between the institute and the funding agency. As a traditional exception, HITS shall not claim ownership of copyright on books and publications authored by HITS personnel.

Any IP generated when an Inventor from the institute works in a university or company abroad/in India on EOL/sabbatical leave/earned leave, will be jointly owned by HITS and the University/Company.

TECHNOLOGY TRANSFER

The Intellectual Property of the Institute held either in the name of HITS or jointly with other Institutions/Industry will be marketed for commercial exploitation under agreements involving technology transfer, licensing and revenue sharing models.

The IP Cell shall identify potential licensee(s) for the IP to which HITS has ownership. In case of joint ownership, the Organization/Industry which has sponsored the activity, will have the first right to commercially utilize and exploit Intellectual Products emanating from the collaboration activity, whether or not the same have been formally protected by patent(s). The licensing to commercially exploit would involve technology transfer fee and also royalty payment from the first date of such commercial exploitation for a period that will be as mutually agreed upon.

In the event of the other collaborating organization/industry not undertaking the commercial exploitation within a reasonable period of two years from the first dateof development of the technology, HITS reserves the right to transfer the said know-how to a Third Party for its commercial exploitation and use. In such instance, however, HITS shall share the net proceeds from such commercial assignments, in equal measure with the collaborating organization/industry in the ratio as agreed upon in the Memorandum of Understanding of the specific project.

HITS would endeavour to exploit the IP by commissioning a Technology Management Agency and thereby bring to a favourable light the IP produced by its Inventor(s). The Inventor(s) may seek HITS to assign the rights to them after a certain holding period.

REVENUE SHARING

The revenue arising out of licensing of IP and royalty would be shared in the appropriate ratio (currently, this ratio is 60:40) between the inventor(s) and the Institute. Where HITS reassigns the right of the IP to its investor(s), the inventor(s) shall reimburse all the costs incurred by HITS, which include protection, maintenance, marketing and other associated costs.

INFRINGEMENTS, DAMAGES, LIABILITY AND INDEMNITY

As a matter of policy, HITS shall, in any contract between the licensee and HITS, seek indemnity from any legal proceedings including this, but not limited to manufacturing defects, production problems, design guarantee, upgradation and debugging obligation.

HITS shall also ensure that HITS personnel have an indemnity clause built into the agreements with licensee(s) while transferring technology or copyrighted material to licensees.

If the inventor(s) and/or their immediate family have a stake in a licensee-company, then they are required to disclose the stake they and /or their immediate familyhave in the company, and license or an assignment of rights for a patent to the licensee - company in such circumstances, shall be subject to the approval of the IPManagement Committee.

DISPUTE RESOLUTION

In case of any disputes between HITS and the Inventor(s) regarding the implementation of the IP policy, the inventor(s) may appeal to the Vice-Chancellor of HITS. Efforts shall be made to address the concerns of the inventor(s) by developingand instituting an arbitration mechanism and arrangement. The Vice-Chancellor's decision in this regard would be final and binding on both institute and inventor.

JURISDICTION

As a policy, all agreements to be signed by HITS will have the jurisdiction of the courts in Chennai and shall be governed by appropriate laws in India.

7.0 GENERIC TRAINING FOR RESEARCHERS

Introduction

Generic (or transferable) skills are those which the researchers should develop over the course of their study (i.e. career management, problem solving, teamwork and leadership) in addition to their research skills which will enhance their employability whether in or out of academia. A Research degree is the beginning of a career with a research viewpoint and withnew thinking and analytical skills. Future opportunities will require people not only with high level research skills but also who are good managers, decision makers, thinkers and communicators.

The training programme is a series of events designed to support all researchers by introducing a variety of research skills and techniques that will help them to progress successfully through the research degree studies and also equip the researcher for a future career.The various sessions are designed so as to bring together researchers from varied disciplines, to foster discussion and to develop research and transferable skills associated with the processes of effective career management.

The training program aims to enhance the effectiveness of the researchers by building their understanding, skills and confidence in communication, planning and time management, leadership and assertiveness. The program includes information on strategies for carrying out literature review, structure and positioning of the literature review chapter and the skills involvedin the whole process. A good literature review expands upon the reasons behind selecting a particular research question. Methods of mitigating the risks are explored within the policy and legal framework governing the health and safety aspects of research conducted at the University. Scientific writing standards required for the researchers are dealt with. The intricacies of setting

out and defending a thesis are discussed and guidance given on titles, structure and style. Focusis also on the understanding of the viva examination, the role of supervisor and the confidence in facing viva-voce. It is important that researchers develop an understanding of how to communicate research to various types of media. To facilitate

this a session is framed to have a discussion with the experienced senior colleagues on the tips to publish research outcomes in journals and conferences.

At the end of the generic training component of the programme the researchers would be able to demonstrate original, independent and critical thinking, apply effective project management through the setting of research goals, set realistic and achievable career goals, identify and develop ways to improve employability and appreciate the need for and show commitment to continued professional development .

Summer /Winter School

The summer / winter school is held in June or December and is open to all researchers inthe University. It is an excellent opportunity to meet other part time researchers, to share ideas and thoughts and to develop new research skills.

Proposed Sessions

1. How to be an Effective Researcher

2. Significance of Literature Review

3. Research Methodology

4. Health and safety in research

5. Importance of Planning

6. Research oriented writing skills

7. Statistical Analysis for Researchers

8. Ethics in Research
9. ENDNOTE

10. Editing a PhD Thesis using LaTeX

11. To prepare a Research Degree Submission

12. Viva and process of Research Degree Examination

13. Publicizing your research

How to be an Effective Researcher

The session aims to enhance the effectiveness of the researchers by building theirunderstanding, skills and confidence in

- Communication
- Planning and time management
- Problem solving
- Leadership
- Assertiveness.

It also helps individuals to understand their own learning and working styles.

By the end of the session, the researcher would have

- Developed a personalized approach to prioritization
- Explored the current distribution of time and energy
- Understood the ways to improve the use of time and energy
- Learnt the methods for simplifying and clarifying communication

Significance of Literature Review

A literature review is a critical and in depth evaluation of previous research. It is a summary and synopsis of a particular area of research, allowing anybody reading the paper to establish why they are pursuing this particular research program. A good literature review expands upon the reasons behind selecting a particular research question.

A literature review is the key to identifying and explaining:

- Extent of work already completed in the researcher's chosen field of research
- Importance of research in the field
- Scope of unexplored concepts

This session will introduce researchers to the importance, purpose, content and sources of the literature review as part of research. The session will also include information on strategies for carrying out the literature review, structure and positioning of the literature review chapter and the skills involved in the whole process. The

researcher will also get an idea of how to go about mining the vast amount of literature published.

8.0 RESEARCH METHODOLOGY

This session will cover data collection methods and simple analysis. It will examine aspects of survey as to how researchers can structure them so as to make them attractive to their target respondents. It will also outline further possible data analysis methods and explain how to get help with the quantitative aspects of your research.

The researcher will be introduced to a range of data elicitation techniques and research methods within a qualitative methodology framework.

Health and safety in research

The session is mandatory for researchers whose research involves laboratory work orfield work. The following points would be focused on during the session.

- What are the hazards involved in your research?
- Have you thought about the risks?
- What are your legal responsibilities?
- Better understanding of legal implications of research

The session will guide the researchers to review their research activities, identify the associated hazards and the level of risk involved. Methods of mitigating the risks will beexplored within the policy and legal framework governing the health and safety aspects of research conducted at the University.

By the end of the session the researcher will be able to identify the hazards associated with his research, problems that need to be encountered and the steps that could be implemented to minimize the occurrence of hazards.

Importance of Planning

Organizing and planning a research project can involve dealing with a multitude of issuesincluding equipment, external companies and organizations, technical staff, testing regimes, access to data sources, funding etc. Often researchers are faced with their programme being pushed off course because of events that could have been foreseen with some planning.

The session aims to introduce researchers to the tools and techniques of project and risk management and offers an opportunity to explore, evaluate and plan the activities necessary to successfully complete the research. It will involve discussions on quality, cost and duration factors in the monitoring and control of research. The session is intended to be participatory and will involve group activities.

As an outcome of the session the researcher will be able to identify the key activities and structure of his research studies, plan, evaluate and identify the risks involved and be able to manage time effectively.

Research oriented writing skills

All scientists must write. Information must be published in order to be readily accessible and the career prospects depend largely on the written output. The technical writing course aims to improve participants' writing skills by describing and using a procedure which ensures that written work is clear, concise and effective. Overall the focus is to improve the scientific writing standard of the researchers.

- Planning your writing – strategies and techniques for researchers
- Language of critical thinking in writing
- Writing chapter introductions
- Writing chapter conclusions

At the end of the course the participants will be able to:
- Recognize common inaccuracies in scientists writing and know how to avoid them.
- Be aware of the importance of writing clear, concise English and to understand various ways of achieving this.
- Know how to write the different components of a research paper
- Be able to prepare clear, informative tables and figures.

Statistical Analysis for Researchers

Statistical methods can summarize or describe a collection of data that is particularly useful in communicating the results of experiments and research. In addition,

data patterns may be modeled in a way that accounts for randomness and uncertainty in the observations. These models can be used to draw inferences about the process or population under study. Dataanalysis is the application of one or more statistical techniques to a set of data as collected from experiments, sample surveys and observational studies.

The session will focus on:

- Descriptive Statistics
- Hypothesis Testing
- Chi – Square test of Independence
- Correlation Studies/ Regression
- Tests of Difference

Ethics in Research

Ethical behavior, confidentiality and anonymity are fundamental cornerstones of research. All researchers must meet the standards prescribed by the University. This session will discuss issues surrounding ethical considerations in research and the University's regulations. The session will also explore different methods for protecting the identity of the participants and commercially sensitive work.

The session will enable researchers to :

- Be more confident in planning, conducting and reporting on research that has ethical issues
- Understand the University requirements for ethical approval of research studies.
- Have the opportunity to discuss challenging ethical issues

EndNote

EndNote is the market leader in commercially available reference management software packages. It allows the user to search and import references automatically from preferred online databases, provides quick access to references and gives the user the ability to cite them instantly when writing a document for publication. This integrated writing solution saves users countless hours of typing and interpreting style requirements

for publications, making EndNote an essential tool for research, writing and publishing.

The session will focus on:

- How to organize the references in EndNote using groups
- Find specific references in EndNote by using the Search Tool
- How EndNote Web can be used alongside EndNote
- Writing a paper with the help of EndNote

At the end of the presentation, the participants will have a 'hands-on session'.

Editing a Ph.D Thesis using LateX

LaTeX is a widely used open source NON-WYSIWYG (**W**hat **Y**ou **S**ee **I**s **W**hat **Y**ou **G**et) document preparation system based on TEX, a markup language. LaTeX is a powerful type- setting environment used by researchers to prepare high quality typographical documents such as research articles, Ph.D thesis and scientific and engineering textbooks. It has elegant features to overcome the inherent difficulties present in a regular word processor in preparing documents involving complex mathematical formulae and various floating objects such as tables and figures that need to be properly placed. Expertise in LaTeX enables the researchers to save time and effort in creating high quality documents with greater control over the structure of their documents. The session on LaTeX is designed for beginners, which will cover the following topics:

- Introduction to LaTeX
- Setting up LaTeX on Windows Computer
- Basic structure of LaTeX documents
- Essential LaTeX commands
- Type-setting LaTeX
- Handling floating objects such as Tables and Figures
- Indexes, Bibliography, footnotes, etc
- Setting up your document format
- Hands-on Session
  To prepare a Research Degree Submission

The intricacies of setting out and defending a thesis will be discussed and guidance givenon titles, structure and style.

The session will provide researchers with:

- An opportunity to understand the role of the thesis
- An understanding of how to go about choosing a thesis and writing a dissertation
- Tips on the content of the thesis
- Suggestions on titles, style and structure for dissertation
- An understanding of the expectation of the examiners of a research degree submission.

The researchers will have a clear idea of writing a thesis at the end of this session.

Viva and process of Research Degree Examination

If there is anything that makes researchers shiver, it is the thought of the two to three hourinterrogation on the research or research degree viva.

This session will provide researchers with:

- Greater understanding of what the viva examination is attempting to do and theformat of a typical viva - voce
- Confidence in facing viva-voce
- Clear idea on how to prepare for viva-voce
- The role of supervisor in the viva

The researcher will be able to face the viva –voce more confidently and with an openmind. Moreover he will be equipped to face tricky situations and how to overcome it.

PUBLISHING YOUR RESEARCH

Communicating your research to a wide variety of audiences is an increasingly importantaspect of all researchers' roles. The aim of the session is to introduce the

many ways in whichthe research work can be communicated to the academic world and beyond. It is important thatresearchers develop an understanding of how to communicate research to various types of media.This would be organized as an open forum style session in which senior colleagues from different disciplines will transfer and share their experience on publishing the research findingsand outcomes in journals, at conferences and in dealing with the media.

The outcome of the session would be to raise the profile of the research, build confidence in dealing with the media and define tools and techniques used in communicating with themedia.

S.No	*Session Titles*	Relevant to Year		
		1	**2**	**3**
1.	*How to be an Effective Researcher*	☐		
2.	*Significance of Literature Review*	☐		
3.	*Research Methodology*	☐		
4.	*Health and safety in research*	☐	☐	☐
5.	*Importance of Planning*	☐	☐	
6.	*Research oriented writing skills*	☐	☐	☐
7.	*Statistical Analysis for Researchers*	☐	☐	☐
8.	*Ethics in Research*	☐	☐	
9.	*ENDNOTE*	☐	☐	
10.	*Editing a PhD Thesis using LaTeX*		☐	☐
11.	*To prepare a Research Degree Submission*		☐	☐

12.	*Viva and process of Research DegreeExamination*		☐	☐
13.	*Publicising your research*		☐	☐

This chart is only a guide

CENTRE RESEARCH AND CONSULTANCY

PROGRAMME

Sessions conducted in the month of May/June

S.No	Seminar Topics	No of Days
1. 2. 3.	**Module 1** How to be an Effective ResearcherSignificance of Literature Review EndNote	2
1.	**Module 2** Research Methodology	2
1. 2. 3.	**Module 3** Health and safety in ResearchImportance of Planning Ethics in Research	1

HINDUSTAN
INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)

CENTRE RESEARCH AND CONSULTANCY

SESSIONS CONDUCTED IN THE MONTH OF DECEMBER/JANUARY

S.No	Seminar Topics	No of Days
	Module 1	
1.	Statistical Analysis for Researchers	2
	Module 2	
1.	Research Oriented Writing Skills	
2.	Editing a Ph.D Thesis using LaTeX	2
3.	To prepare a Research Degree Submission	
	Module 3	
1.	Viva and process of Research Degree Examination	1
2.	Publicising your Research	