## **IPS ACADEMY**

# INSTITUTE OF ENGINEERING & SCIENCE Indore (M.P.)



## A UGC Autonomous Institute Affiliated to



Rajiv Gandhi Proudyogiki Vishwavidyalaya Bhopal

**Research & Development Policy** 



#### Vision

To be the fountainhead of novel ideas & innovations in science & technology & persist to be a foundation of pride for all Indians.

#### **Mission**

To develop and expand innovative research programs that align well with institutional mission and strategic plan, address important national and global needs, and through technology transfer and commercialization



### **Objectives**

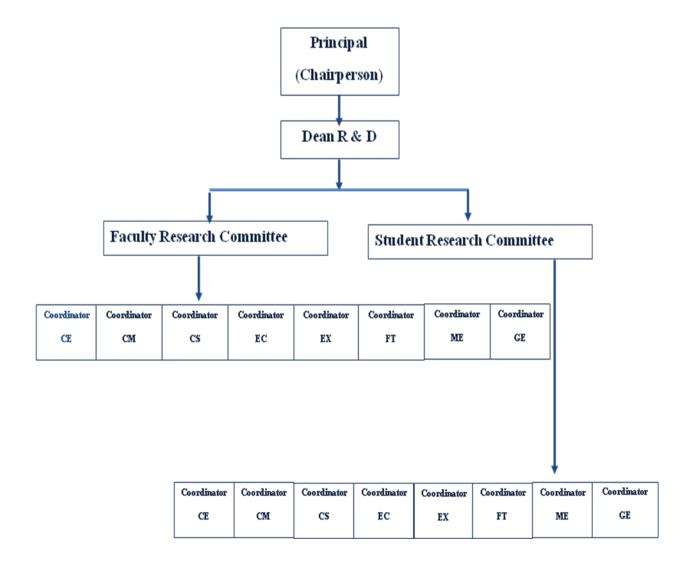
- R&D Cell aims to foster research culture in the College by promoting research in newly looming and challenging frontier areas of Engineering, Technology and Science.
- It encourages the students and faculty to undertake the research in in multidisciplinary fields.
- This fortifies the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc
- To encourage young Engineers to take up challenging R&D activities.
- To encourage patenting facilities to Engineers in the country for Indian and foreign patents on a sustained basis.



#### Functions of R & D

- ➤ Identification of thrust areas of research in each department
- Advise and encourage the faculty to carry out research inhouse and in collaboration with other organizations
- Visit various departments and meet the faculty to encourage and motivate them to undertake research projects and to scrutinize the proposals before submitting to funding agencies
- ➤ Identification of physical and human resources to carryout research
- ➤ Identify the budgetary requirements and resources for funding the research
- Review the progress of research and offer necessary guidance whenever required
- Monitor and propose the funding from college budget for promotion of research activities
- ➤ Identify different organizations/ industries to undertake collaborative research on current topics of mutual interest.
- To develop state of art laboratories.
- To develop research center in the institute.

### **Proposed Structure of R & D**



#### **Constitution of Research Advisory Committee (RAC)**

The constitution of Research & Development (RAC) is as follows:

- 1. Dr. Archana Keerti Chowdhary, (Principal) Chairperson
- 2. Dr. Amit Sharma, Professor, Dean Research & Development
- 3. Dr. Abhinesh Prajapati Associate Professor, Coordinator
- 4. Dr. J. Ponomozhi, Associate Professor, Mechanical Engineering Member
- 5. Dr. Dharmendra Singh Yadav, Associate Professor, Electronics & Communication Engineering, Member
- 6. Dr. Sumit Bhatiya, Associate Professor, Fire Tech & Safety Engineering, Member
- 7. Dr. Neeraj Shrivastava, Associate Professor, Computer Science & Engineering, Member
- 8. Dr. Vaishali Gupta, Associate Professor, Computer Science & Engineering, Member
- 9. Dr. Devanshi Jagwani, Associate Professor, Civil Engineering, Member
- 10. Dr. Kanti Kumar Athankar, Assistant Professor Chemical Engineering Member
- 11. Dr. V. G. Sadh Associate Professor, Humanities, Social Science and Management, Member
- 12. Dr. Nisha Agrawal, Associate Professor, General Engineering, Member

The responsibility of the research advisory committee is to implement & monitor the framed policies which help to the promotion of research activities for the benefit of all.

### Strategies of R & D Cell

In order to promote research and development activities, the institute extends its full support to students and faculties. Full/Partial financial support is given to all innovative research & development works taken up by the students and faculty members. The institute encourages students and faculties to participate in National/International Conferences, Training programmes, Tech-Festivals organized by reputed institutes (IITs/IISc/IISERs/NITs/Central Universities/State Engineering Colleges etc.) by giving full/partial financial support viz. course/registration fee, TA/DA etc. Faculties are given incentives for publishing their research papers/ books/book

chapters/seed money etc.

#### **Short Term Strategic Planning**

- To conduct conference on contemporary issues viz. environmental technology, artificial intelligence & Machine Learning etc.
- To encourage faculty members and students to publish technical papers for publishing in National and reputed International Conferences/Journals

#### **Long Term Strategic Planning**

- > To establish PhD research Centre in the institute.
- To promote facilities and interdisciplinary R&D work in the institute.
- To promote research collaboration with National/International institute of repute.
- To promote industry institute interaction/collaboration.
- Motivate the faculty members for post-doctoral research through various fellowships like National Scholarship Program Slovakia, DAAD Germany, Erasmus Mundus scholarship European Union, US etc.
- To encourage Core Competence and Consultancy work
- To organize various workshops/ seminar/ trainings related to promotion of research
- To create awareness about filing Patents & IPR
- To undertake research activities and development projects offered by agencies such as DST, CSIR, AICTE, UGC, DRDO etc.
- To assist the faculty members to apply funding for conducting research.

### **Expected Output/Outcome**

- > International/ National Collaborations
- Decent number of articles likely to be published.
- ➤ Good number of patents will be filed.
- ➤ Good number of internships will be offered by industries to the students.

## **Policies for Promotion of Research**

- 1. Establishment of Policy for Promotion of Research
- 2. Policy on Promotion of Academic Research
- 3. Policy for Research seed money
- 4. Incentives & Other Benefits for Faculty Members

#### 1. Establishment of Policy for Promotion of Research

The institute shall develop policies for promotion of academic research, seed money for researchers, policies on ethical research with code of ethics and incentives along with other benefits for faculty members.

#### 2. Policies on Promotion of Academic Research

The faculty members, scholars and students of institute are committed to the pursuit of truth, honesty and integrity, to uphold the vision-mission of our institution, to safeguard and promote public interest during our research activities.

Institute encourages the enrolment of faculty in Ph.D programmes and to declare suitable incentives for Ph.D holders and to those published research articles in journals and reputed journals.

#### 3. Policy for Research SEED Money

- Every faculty is eligible to apply for internal project which shall lead to collaborative / externally funded research projects.
- ➤ The institute shall provide the basic infrastructure required to conduct research projects.
- ➤ Faculties are encouraged to identify inter-disciplinary research in their chosen field of research.
- ➤ All innovative R&D projects of faculty completed using the seed money shall be ear marked for filing patents. Institute initially helps financially to filling the patents. Further, suitable recognition and remuneration will be given to those faculties with patents.

Faculty members shall take appropriate actions to get their innovations covered by IPR and copyright protected.

#### 4. Incentives & other Benefits for Faculty Members

The policy for awarding incentives and other benefits for the Faculty Members to motivate, involve in R&D / Funding / Consultancy / Knowledge update shall be as follows:

#### Category 1: Research Publications, Book Chapters, Book Publications and Patents

- ➤ Research Papers in SCI Journals Rs 15000/-
- ➤ Research Papers in E-SCI, Scopus, Peer reviewed and UGC Refereed Journal Rs 5000/-
- ➤ Academic Book Authoring Rs 5000/-
- ➤ Academic Book Editing Rs 2000/-
- ➤ Patent–All expenses on reimbursement basis & an incentive of Rs 15000/-

PS: For Sr. No. 1 to 4 the incentive amount shall be distributed equally in case of multiple authors.

#### **Category 2: Attending Seminars / Conferences / Workshops**

- ➤ Registration fee will be paid by the institute along with travel and accommodation (up to Rs 25000/- within India and 50% of the travel, accommodation, and registration fee for abroad per faculty per year)
- ➤ Duty leave shall be extended including a day prior and a day after the programme, if it is outside Indore / India.

#### Category 3: Study online Course in Advanced Domain Area

Examination fee shall be paid fully. Provided he/she passes the examination.

All the contributions/Acknowledgement need to have IPS Academy, Institute of Engineering & Science affiliation.

#### **Category 4: Study Leave**

Institute provides facility for upgrade skills and knowledge of faculties that help institute to create a quality workforce. Policy aims to introduce a provision of study leave that may enable faculty to undergo course/program in professional or technical subject in a reputed institution in India and abroad. Institute will provide study leave to applicant on following condition;

➤ Applicant must have completed one-year continuous service in the institute on the beginning date of study leave.

- > Study leave shall be given for attending course work. In addition the applicant may be allowed to avail 10 days extra leave per year for maximum 3 years for any work related to PhD.
- Applicant should submit one month prior notice to the head of the institute.

#### **Category 5: Recognitions of Faculty for Research Award**

Cash price of Rs. 25000/- & Certificate of appreciation shall be given to faculties for getting research awards from state / central government / Premier institute like IITs, NITs etc.

#### **Category 6: Research by Seed Funding**

- ➤ The seed funding is the system in which faculties are encouraged to undertake research with certain basic grant released by the institution to procure new equipments/instruments etc or to meet other R and D expenses.
- The seed money to the tune of Rs 20 lacs shall be payable to the faculties involved in Innovative R& D projects annually.
- ➤ Institute will call for research proposals every year for the same.
- ➤ In addition, student projects leading to innovative model development are financially supported either partially or fully based on departmental project review committee report.
- > Separate budgetary proposals are made to meet the above financial requirements in the form of "Seed Funding for Research".

#### **Category 7: Consultancy / Testing**

IPSA, IES welcomes relevant consultancy/Testing work. However final approval will be governed by Director/Principal IPSA, IES. General Guidelines (which are subject to change from time to time) in this respect are given below.

#### Scope

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

#### **Norms:**

Consultancy work will be taken up by the IPSA, IES faculty and research staff subjected to the following norms:

> The responsibility for conduct of the project and the deliverables will lie with the

- Consultant Faculty-In-Charge, and respective head of the institute will only provide the necessary administrative support.
- The time spent on consultancy and related assignments shall be limited to the equivalent of one to two working day(s) per week. In addition, consultants may like 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 academics, research and related activities.

#### **Consultancy Rules: Travel**

- > Travel out of the campus on account of consultancy activities should be undertaken with intimation to the Head of the department. In case of Heads of these entities, intimations should be sent to Head of the institute.
- ➤ Outstation travel of consultancy assignments may be undertaken normally with the prior approval of the Head of the Institute as the case may be.

#### **Consultancy Rules: Project Execution**

- ➤ All the work testing and consultancy must come to the Director to be allotted to a relevant department. All the test report will be considered valid only after signature of HoD/IC of the department and counter signature of Director.
- ➤ Consultancy project proposals (prepared in response to a client's request) are to be approved by the Head of the Institute, who may examine the scope of the work and cost estimates. It is essential to discuss proposed work plans with a client, the scope and projected time-line, in order to obtain clarity before the consultant prepares the cost and estimates.
- ➤ The Charges, once finalized, will not be negotiable. Provision for service and other taxes as applicable. However, if the scope is altered, a fresh estimate may have to be considered.
- The bills will issued by the department through principal office generally in two parts (1) Testing/Consultancy Fee (2) Contingency expenses like labour, raw material, travel etc. incurred in carrying out the work as per actuals.

#### **Consultancy Rules: 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 period exceeding 3 months.
- ➤ In case of large assignments, a payment schedule linked to milestones can be worked out. Such a payment schedule should ensure that
  - a. Advance payment is received for every segment of work, and
  - b. The number of installments is reasonable and consistent with case of implementation.
- > Testing work will be carried out by a team of faculty and laboratory staff assignments will be allotted by the department
- a. Consultancy
  - i. Thirty percent of fee will be deposited in the college account.
  - ii. Sixty percent of fee will be distributed to the members of faculty team carrying out the work
- iii. Remaining ten percent will be distributed as below:
  - o Director 2%
  - o I/C Department 3%
  - o College and Academy Office 5%.
- b. Testing
  - i. College Account 50%
  - ii. Testing Team- Faculty 30%

Lab. Staff 10%

iii. Remaining to be distributed, as per a. (iii) above.

#### **Category 8: Membership of Professional Bodies**

The Professional bodies aims to support faculties professionally and aid them in progressing within their career/profession. The faculties are encouraged to become member of professional bodies to get connected with the members of professional bodies. The guidelines for the same are as follows:

- ➤ The membership fees of the faculties for Professional Bodies (IEEE, IWWA, ISTE, ICI, IE(I), CSI etc) up to maximum Rs 15000/- per faculty per year is sponsored by the institute.
- ➤ The faculties selected under college code '30" with minimum two years' experience shall be eligible for the reimbursement of fees as above.

## **Code of Ethics in Research**

#### **Preamble**

This Code of Ethics is aimed at prevention of malpractices and plagiarism in Research works carried out by the faculty members, scholars and students at IPS Academy Institute of Engineering & Science, Indore. The principles of this Code of Ethics are with the noble purpose of guiding researchers to an ethical course of action enriched with the values and mission of institute.

The faculty members, scholars and students of institute are committed to the pursuit of truth, honesty and integrity, to uphold the vision-mission of our institution, to safeguard and promote public interest during our research activities.

Code of ethics are drafted as per the protocol defined by the various governing bodies at national level namely AICTE for research ethics (AICTE, 2014) and from CSIR Guidelines for Ethics in Research (CSIR, 2019)

#### **Principles**

#### Principle 1: HONESTY in the Development, Undertaking and Reporting of Research.

IPSA-IES researchers present information truthfully and accurately in proposing, conducting and reporting on research. In the conduct and dissemination of research institute researchers:

- a) Do not falsify, fabricate, plagiarise, mislead, or misrepresent (either in writing, through electronic/online means or by any other means)
- b) Do not deviate from accepted practices in the specific research discipline or pertaining to specific communities
- c) Obtain all relevant licenses, permits, permissions and protocols, where necessary.

#### Principle 2: RIGOUR in the Development, Undertaking and Reporting of Research.

All research conducted by IPSA-IES researchers is underpinned by attention to detail and robust methodology, avoiding or acknowledging any known biases.

## Principle 3: TRANSPARENCY in Declaring Interests and Reporting Research Methodologies, Data and Findings.

**IPSA-IES** researchers:

- a) Share and communicate research methodology, data and findings openly, responsibly and accurately
- b) Disclose and manage conflicts of interest.

#### Principle 4: FAIRNESS in the Treatment of others.

**IPSA-IES** researchers:

- a) Treat fellow researchers and others involved in the research fairly and with respect
- b) Appropriately reference and cite the work of others
- c) Give credit, including authorship where appropriate, to those who have contributed to the research

## Principle 5: RESPECT for Research Participants, the Wider Community, Animals and the Environment.

**IPSA-IES** researchers:

- a) Treat human research participants and communities that are affected by the research with care and respect.
- b) Engage with all research participants and communities prior to research being undertaken so that they can freely make decisions about their involvement. Communicate the outcomes of research to those that have participated.
- c) Ensure that respect underpins all decisions and actions related to the care and use of animals in research
- d) Minimize any adverse effects of the research on the environment.

## Principle 6: ACCOUNTABILITY for the Development, Undertaking and Reporting of Research.

**IPSA-IES** researchers:

- a) Comply with relevant legislation, codes, policies and guidelines
- b) Ensure good stewardship of public and IPSA-IES resources used to conduct research
- c) Consider the consequences and outcomes of research prior to its communication.

#### Principle 7: PROMOTION of Responsible Research Practices.

IPSA-IES researchers promote and foster a research culture and environment that supports the

responsible conduct of research.

We have framed this code of ethics keeping in mind minimizing the risk of harm, obtaining informed consent, protecting anonymity and confidentiality, avoiding deceptive practices, providing the right to withdraw -Research, 2012 (3).

### **Bibliography**

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