

UNIVERSITY OF ENGINEERING & MANAGEMENT Good Education, Good Jobs

# UNIVERSITY OF ENGINEERING & MANAGEMENT

(Established by Act XXV of 2014 of Govt. of West Bengal & recognized by UGC, Ministry of HRD, Govt. of India)

University Area, Plot No. III-B/5, Main Arterial Road, New Town, Action Area-III, Kolkata - 700 160, W.B., India

Admission Office: 'ASHRAM', GN-34/2, Salt Lake Electronics Complex, Kolkata - 700 091, W.B., India

Website

Phone : 91 82740 88608 Admissions : 91 33 2357 2059 Fax : 91 33 2357 8302

E-mail : vc@uem.edu.in
Website : www.uem.edu.in



# UNIVERSITY OF ENGINEERING AND MANAGEMENT, KOLKATA

# INSTITUTIONAL RESEARCH POLICY

University Area, Plot No. III-B/5, New Town, Action Area-III

Kolkata-700160

Prof. (Dr.) Sajal Dasgupta

Vice-Chancellor University of Engineering & Management, Kokata

#### Other institutes of the Group

University of Engineering & Management (UEM) Jaipur - 6 Km. from Chomu on Sikar Road (NH-11), Jaipur-303807, Rajasthan. Ph. 01423-516102 Institute of Engineering & Management (IEM) - Salt Lake Electronics Complex, Sector - V, Kolkata - 700 091, West Bengal. Ph. (033) 2357-2969

New York Public School - GE, 4/A, Sector - III, Salt Lake, Kolkata - 700 106, West Bengal (Near Tank No. - 12, Behind NIFT Girls' Hostel)



# MANAGEMENT, KOLKATA

INSTITUTIONAL RESEARCH POLICY 2022

<u>University Area, Plot No. III - B/5, New Town, Action Area – III,</u>

<u>Kolkata- 700160</u>

#### **CONTENTS**

Introduction: UEMK and Research

- 1. Promotion of research
- a) Providing Seed money to the faculty for research
- b) Doctoral Research
- c) Set up different laboratories and instruments
- d) Business laboratory/ Hotel management laboratory/ Studio
- e) Maintaining research /statistical database
- 2. Resource mobilization for Research
- a) Mobilization of resource from Government agencies/ Industry
- b) Mobilization of resource from non-Government agencies/ Industry/ Other Recognized Organizations (National/ International)
- 3. Innovation ecosystem
- a) Intellectual property right protection
- b) Workshop/ Seminar/ Conference
- c) Industry academia partnership
- d) Patent
- 4. Research publications and awards
- a) Ethics of publication
- b) Incentive for faculties on receiving grants/award /recognition from external agencies
- c) Publication of Books, Book chapters, Conference proceedings and other publications
- d) Bibliometric of publication based on citation index
- 5.Consultancy
- 6. Extension Activities
- a) Student awareness on Social issues
- b) Alliance with Government/ Non- Government/ Recognized Organizations

- 7. Collaboration
- a) Collaborative research work

- b) Faculty exchange
- c) Student exchange
- c) Association with institution /industry (project work/ Internship/ Job training/ Sharing instrumental or other research facilities)
- d) Memorandum of Understanding

#### 1. Promotion of Research Activities

University of Engineering and Management, Kolkata shall take several initiatives as detailed below to promote research

# a) Providing Seed money to the faculty for research

In order to encourage faculty members to undertake research work, the University shall provide financial support as seed money for commencement of research. Research advisory board/Committee will decide the eligibility criteria, amount of fund, manner of distribution and will be notified by the university at different time interval.

# b) Doctoral program is promoted and incentivized at UEMK.

The university has a robust Research team which is continuously engaged in supporting PhD programmes of the university in multiple disciplines. Various incentives schemes are also available to doctoral scholars of UEMK.

# c) Set up different laboratories and utilization of instruments (in house/external)

Both hardware and software developed by the faculty and students are encouraged to be used in house. Some of them are already been incorporated in the functioning of the university.

UEMK supports and engages in developing research labs in a diversified field of study. The university has promoted Labs in emerging technologies, innovation drives through electric vehicles including, cars, bikes and cycles.

For conducting major research project or research projects with multidisciplinary aspect the University shall provide infrastructural facilities including building space, laboratories and allied facilities. University shall provide administrative support in terms of procedural flexibility to enable faculty members to utilize resource and supports available in different government or other agencies.

Incentive Scheme:

Tuition Fellowship & Research / Teaching Assistantship for Ph.D. Research Scholars under supervision of Ph.D. Faculty:

Full time MTech. and Ph.D. students of IEM and UEM doing in-person classes and attendance every day (90% attendance) will be eligible for full tuition waiver scholarships along with Teaching Assistantships / Research Assistantships of Rs. 20,000/- (for full time M. Tech. students) and (Rs. 30,000/- for full time Ph.D. students) if students have 8.0 and above (or 80% and above) throughout in aggregate.

The tuition waiver scholarships and Teaching Assistantships / Research Assistantships will not be applicable for part-time students or students who hold jobs or students whose attendance is

not 90% or students who do not have aggregate 80% throughout to continue. The additional condition for the tuition waiver scholarship and TA / RA to continue is to publish at least 2 Scopus / SCI indexed papers publication after 1 year of coursework.

It has also been kept in the employability condition that at least two Scopus / SCI publications and one patent, one project and one consultancy is mandatory per year. Co-authors cannot count the same publication to fulfil publication criteria.

# d) Maintaining research /statistical database

All research publication/ Progress report/ Ph.D. dissertation copies and other related documents should be kept in the Central library for future correspondence under the administrative control of senior academicians / officers nominated by the Vice chancellor.

#### 2. Resource mobilization for Research

# a) Mobilization of resource from Government agencies/ Industry

The University shall inspire faculty members and students to approach different organization under State Government and Central Government for funding different research projects under different scheme based on their area of specialization. With the research ideas generated through Internal funding in terms of seed money, faculty may apply for externally funded projects of further financial support.

# b) Mobilization of resource from non-Government agencies/ Industry/ Other Recognized Organizations (National/ International)

To congregate long term expenditure of the research projects, The HOD, Deans or faculty members may approach different non-Government sources (national/international) to mobilize funds under different projects or schemes specified for the purpose.

# c) Incentivization Scheme

# Research Project Funded by Internal and External Funding Agencies:

The University shall always inspire faculty to approach National and International funding organizations such as DST, DST-SERB, CSIR, DBT, DRDO and others to find funding research Projects undertaken by faculty and research students.

The University should also make arrangements to provide the seed money to create interest in research activities. With the research ideas generated through Internal funding faculty may apply for externally funded projects of longer financial requirements.

# a. Grant in Aid Policy:

Grants up to Rs 5 lacs are going to be disbursed to Project groups/Principal Investigator whose research aligns with Govt. of India's thrust areas in the emerging technology applications to practical and societal/national problems.

#### b. Incentive for Externally Funded Research:

The Institute shall pay the research team an incentive equivalent to 5% of the research grants received from external funding agencies

# 3. Innovation ecosystem

The University shall create a ecosystem for innovation and knowledge transfer though different initiatives like intellectual property awareness program,

#### a) Intellectual Property Rights protection

UEMK has a robust policy to encourage research, consultancy and extension.

The university is focused on developing its research output and making it available for the benefit of the greater community. In doing so, special care has to be taken with regard to Intellectual Property (IP) issues. A research output would ideally attract multiple IP issues, which should be handled professionally to avoid future complications.

The university would host an Institution Innovation Council (IIC) to address the university's IP issues relating to innovation and research outputs.

Through the council, the university would create an ecosystem for innovation, including establishing an incubation Centre to assist in the creation, protection, safeguarding and transfer of knowledge.

ICC shall conduct an adequate number of workshops amongst the faculty and students to extend assistance in converting ideas to expression in the form of patents, copyright, trademark, designs etc. and create awareness amongst the students and faculty.

ICC shall also conduct an IP awareness drive for students to understand the nuances of plagiarism.

#### Patent

The University aspires to strengthen research, leading to filing of Patents for which the guideline is already available. If any innovation is done, the university would encourage the researchers and scholars to patent it. The university also gives financial assistance to faculty concerned regarding patent filing. The university creates awareness about intellectual property signs among faculty, researchers and scholars from time to time.

Incentive Scheme:

#### Patent:

**Revenue Sharing:** 50% of patent revenue will be retained by the institute and 50% will be shared amongst the inventors after selling the rights of the granted patent.

**Reward:** Rs. 10,000 to the inventors after a patent is granted with the applicant name as the institute / university.

### b) Workshop/Seminar/ Conference

The University will encourage faculty members of various department for conducting workshop/seminar/ conference on regular basis. It shall be mandatory for the organizers to get approval from the University authority and from concerned Government agencies if applicable. The organizer of any workshop/seminar/conference should submit all the related necessary document to the office of Vice Chancellor / Registrar and keep records submission to university authority including regulatory bodies.

On an average the university organizes 35 international conferences annually. Nobel Laureates, foreign faculties are regularly involved in training and teaching our students. The university encourages research with best universities across the globe.

# c) Industry academia partnership

Continuous interaction with industry experts will help students to keep themselves updated with dynamics of the job market. University might encourage the participation of industry experts in different committees like Faculty council, academic council etc and also in guest lecture/workshop/seminars etc. All such interactions might require due endorsement and approval of concerned authority.

#### d) Patent

Each noteworthy innovation shall lead to filing patent. University shall provide support for filing of patents and keep proper records of status for filed patent.

#### e) Start-up

University encourages ideas coming up from young minds and provide students start-up grants.

# 4. Research publications and awards

#### a) Ethics of publication

The University of Engineering and Management believes that the occurrence of misconduct is a threat to the basic principle of research. The University defines research misconduct, as any

fabrication and falsification of data, plagiarism or any other deviation from accepted norms and practice in proposing, performing or reporting results arising out of research carried out in university. Misconduct in research demands the integrity of the profession and undermines the credibility of scholars.

Students, research scholars and faculty members need to ensure that only original work would go for submission to any publishing house either in the form of Journal paper or book or presented in conference/ seminar. Plagiarism in any form represent unethical publishing practice and ought to have condemnation. Students, research scholars and faculty members should use University affiliation while publishing.

All submitted thesis being considered for degree by the University should undergo appropriate detection test and anti-plagiarism certificate to be issued by the Office of Library for submission of thesis.

# b) Incentive for faculties on receiving grants/award /recognition from external agencies

University of Engineering and Management encourages academic excellence of faculty members. If faculty members get recognition from external agency in the form of research funding or award, the University shall provide incentives. The details shall be notified by the university from time to time.

# c) Publication of Books, Book chapters, Conference proceedings and other publications

Academic activities like publication of books, book chapters, conference proceedings and other publications should be properly documented. Students, research scholars, faculty members should send information along with copy of the publications to the publication committee about any publication of books, book chapters, conference proceedings and other publications.

#### d) Bibliometric of publication based on citation index

Research office of university shall collect all the research outputs with segregation as-doctoral, post-doctoral, projects, inventions and discoveries, number of patents obtained and number of research publications. Based on the date mentioned above the University shall maintain Bibliometric of publication based on citation index as per recognized bureau like web of science, Scopus, PubMed, Indian citation index etc.

#### e) Incentive Scheme:

### Reputed Journal Incentive:

In case of First Author the institute will give an incentive for publications in journals by faculty members. In case of a team, if the faculty member is only the First Author then the amount shall be shared equally among our institute team members:

The publication should have UEMK affiliation. Either student faculty or the student of UEMK will be the first or corresponding author. In case of First Author the institute will give an incentive for publications in journals by faculty members:

Rs 5,000 for publications in SCI journals and list of IIM recognized Management journals

Rs 5,000 for publications in SSCI journals and list of IIM recognized Management journals.

Rs 5,000 for publications in SCI(E) Journal.

Rs. 3,000 for publications in SCOPUS and ESCI or reimbursement of conference registration.

Rs. 1,000 for IEM UEM foreign journals (except where the same article published in a conference)

#### Book Publication Incentive:

In case of First Author Award for Publications of text books in relevant engineering discipline:

Rs. 25,000/- if the text book is published by an international publishers like McGraw Hill, Prentice Hall, Oxford University Press, IEEE Press, Springer-Verlag GmbH or other internationally reputed publishers.

Rs. 15,000/- if the text book is published by a national publisher like Tata McGraw Hill, Prentice Hall of India, MacMillan India, Sage.

Rs. 10,000/- if the text book is published by Regional / Local publishers.

Rs. 5,000 if a book chapter is published.

It has also been kept in the employability condition that at least two Scopus / SCI publications and one patent, one project and one consultancy is mandatory per year. Co-authors cannot count the same publication to fulfil the publication criteria.

#### 5. Consultancy

The consultancy services in university are of three types:

Institutional: A specific work/ project to be done by a team or department or an individual staff on behalf of the University.

Technical: A routine technical data/information, guidance or analysis and fabrication where interpretation is not needed.

Individual: consultancy undertaken by an academic staff member with her individual contact and expertise.

- Any consultancy work should be routed through the competent authority of University.
- Consultancy activities should not hamper the routine assignments of academic staff members and faculty members.
- The cost of consultancy work shall be given under the following heads:
  - i) Expert fee

- ii) Manpower
- iii) Equipment / Machinery
- iv) Field work
- v) Transport
- vi) Contingency
- vii) Miscellaneous
- GST, TA and DA will be as per agreements with the client.
- Consultancy Revenue Sharing: 30% of consultancy revenue obtained by faculty will be retained by the university and 70% will be disbursed to the faculty members.
- Timeliness of completion / progress of consultancy project is to be noted and assessed.

After the completion of the consultancy project, a copy of the synopsis of the work with the audited statement of accounts will be required to be submitted to the office of Research Cell of the university.

Incentive Scheme:

# Consultancy Revenue Sharing:

30% of consultancy revenue obtained by faculty will be retained by the institute and 70% will be disbursed to the faculty members.

#### 6. Extension Activities

- a) Student awareness on social issues
- b) Alliance with Government/ Non- Government/ Recognized Organizations

#### 7. Collaboration

### a) Collaborative research work

The University shall encourage faculty members to undertake project work jointly with eminent experts from other national or international academic institutions/ industry/ National laboratories. The University encourage faculty members to publish research outcome jointly with experts from other institute. Collaborative work would require endorsement through proper channel and formal agreement or understanding between institutes are encouraged

- b) Faculty exchange
- c) Student exchange
- d) Association with institution /industry (project work/ Internship/ Job training/ Sharing instrumental or other research facilities)

Students from different streams need hands on experience in addition to the knowledge

gathered by the academic curriculum. Different Department of the University along with placement cell shall take initiatives to allocate the students for internship, job training, project work and similar other knowledge-based work in different industry, research lab or other academic institution.

Research facilities are updated on an annual basis in the university.

e) Memorandum of Understanding

#### 8. Incentive Scheme:

# Foreign Visits Incentives:

Each faculty and staff member will be eligible for incentives up to 2 lac per visit for Tickets, Accommodation and Research Assistantship, 3 times a year, for organizing conferences/ Study Abroad Programmes.

# Conference Incentive:

Each staff member is eligible, twice per year, towards registration and travel expenses for institute recognized list of Conference / Journal/Conferences organized by IEM-UEM group:

- Rs 5000 reimbursement for attending National conferences for presentation of paper/s.
- Rs 20,000 for attending International Conferences for presentation of paper/s / publication of papers
- Publishing Patents with good commercial potential
- To establish state of art laboratories and research facilities with the help of funding support from National and International funding agencies.

#### 9. Miscellaneous

# • Research Advisory Board:

Research advisory board comprising of senior experienced members of university itself and external member from industry and academia is formed to provide direction for effective implementation of the above said objectives. Board also should provide suitable planning to make efforts to improve the quality of research infrastructure to facilitate research. Board should create suitable procedures for giving due recognition for supervision of research and also encourage the faculty to undertake research by collaborations with other research organizations / industries in the area of interdisciplinary research.

Internal Research committee under the chairmanship of Vice-chancellor and Dean (Research) and as member secretary. This committee will be meeting on regular basis to monitor the progress of the ongoing research project submit its recommendation to Honourable Chancellor for internal seed fund related sanction.

# • Research and Development Cell:

Research Cell of the University should be responsible for implementing the research policy of the University by working closely with the University Management.

The specific rules and functions of the cell will be as follows:

- a. To setup a research fund for providing seed money of the research.
- b. To encourage and promote a research culture.
- c. To provide facilities in terms of equipment, research journals and incentives required by the faculty.
- d. To prepare budgets for supporting students' research projects.
- e. To invite industry to use research facilities of the University of sponsor research projects.
- f. To encourage and promote the publications of research articles by the faculty in referred Journals.
- g. To create and maintain a data base of research work and research projects under taken by the faculty and students as well as to collect data such as Citation index, Impact factor, h-index etc.
- h. To prepare research publication leading to patent/potential research activities.

# • Incentives for Outstanding Research:

University should encourage quality research in different thrust areas. For this purpose, to encourage faculty researchers, students for praise worthy research contribution, University has prepared a scheme for providing incentive to faculties and research scholars.

The incentives are identified as follows:

- a. Incentives interns for financial benefit.
- b. Incentives interns for awards/prizes.
- c. Incentives interns for more finding for the on-going research.
- d. Incentive interns for certificates for career advancement.

#### • Trainings for Research and Publication:

Generally, faculty are eager to conduct research but because of lack of expertise to write research propose or hiring insufficient research skill, they are unable to channelize their efforts effectively. Hence in many cases research proposals are rejected by the funding agencies. Even for publication of papers because of lack of knowledge about how to write a paper and under which format it should be submitted, sometimes the papers are not accepted. Therefore, the University shall organize training programme for researchers.

# • Publication of Papers in Journals:

Publication of research paper is critical for the effectiveness of the University. Faculty must publish research papers accordingly in quality accredited Journals. Therefore, the University plans to encourage the publication of papers by the faculty with a targeted aim. A faculty member should be expected to publish a certain number of research papers in referred Journals at National and International labels. The University entertains publication of research paper in conference proceedings organized by the University National/International and incentivize the same.

#### • Research Ethics:

The University believes that the occurrence of conduct is a threat to the basic principle of research. The University defines research misconduct, as any fabrication of falsification or plagiarism in proposal, performing of reviewing research or in the reporting of research result. Misconduct in research demands the integrity of the profession and undermines the credibility of scholars.

The University takes seriously of all misconduct and ensure that the procedures for the enquiry, investigation and adjudication of any misconduct are well defined and all parties involved.

Londonto