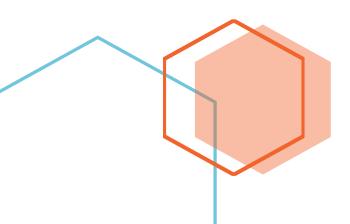


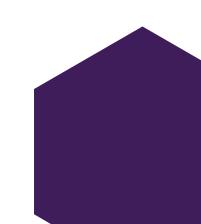
Guidelines of the Research Management Cell

Submitted By: Everest Engineering College Sanepa-2, Lalitpur



Submitted To:
Pokhara University Research Center
Kaski, Nepal





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1. Introduction to the Research Management Cell

Everest Engineering College (EEC) seeks to develop skilled, competent and responsible citizenship as part of a complete education through its engineering programs. Faculty members and other personnel strive to provide students with a variety of opportunities for learning through excellent teaching and activities beyond the classroom to connect to the real world. Research is integral to EEC's mission as a means of teaching students to be original and critical thinkers, improving our communities and society through discovery, invention and solutions. Research Management Cell (RMC) is created with the ambition to channel the research efforts within the academic curriculum as well as beyond the classroom to achieve such a mission and goals.

RMC will facilitate and support members of the faculty in various engineering departments to present public lectures, mini-courses, and discussions on a range of topics of current interest throughout the academic semester. RMC will collaborate with the academic departments so that students work alongside faculty members on undergraduate projects that address the challenges facing our communities and our world. RMC will help students and faculty members compete for external funding, undertake and manage research projects and disseminate findings.

RMC will work together with Pokhara University Research Centre (PURC), guided by their guidelines, requirements and plans. RMC will support the value promoted by the college to create a culture of research at EEC that extends beyond generating research activities. EEC embodies the fact that research is as much about building faculty and students as it is about producing research outcomes that benefit the world. Overseeing a range of research activities to produce outcomes and generate impact will be the core focus of the RMC to achieve the mission and vision set by EEC under the guidance of Pokhara University.

2. Themes to Guide the Objectives of the RMC

- Support Environment: EEC will have an environment where colleagues and students support each other to succeed. RMC will create an environment where collegiality and collaboration is encouraged and supported.
- Career Development: Research is an integral part of an academician's career development and student's training. RMC will support colleagues in their career trajectory and prepare students to solve the real-world problems. Research efforts and contributions will be recognized and diverse career trajectories will be supported.
- Research Output Diversity: Research activities produces different outputs such as data, software, materials and policy frameworks. RMC will promote production of diverse research outputs.
- Rigour, Transparency and Openness: Research should be conducted with an academic rigour to ensure that the research has quality and the results can be trusted. The research outputs should be open to wider audiences and there should be sharing to ensure transparency and reproducibility. RMC will support research that has rigour and is open.

3. Objectives of the RMC

• Prepare the knowledge and innovation workforce:

Engineers invent ideas, techniques and technologies that are adopted by the industries. In large industries they are also required to collaborate across disciplines and work in diverse teams to solve complex problems. RMC will help create an environment where students stay engaged in research-based learning where they work on complex real-world problems and produce original ideas. Students will have the opportunity to interact with active researchers at the institution. The active researchers are faculty members who are

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involved in research and with whom the students or student groups can have a nurturing and collaborative relationship possibly on a running project and co-authoring papers. Research activities will be incorporated into regular coursework through research-based, research-oriented and research-led teaching.

Expand the frontier of research excellence:

Range of activities and roles that contribute to research and creating/maintaining the research culture will be valued and recognised. RMC will give the message that research culture is not only measured through impact assessment and traditional outputs such as journal articles or sellable products. Software, methods, concept notes, draft proposals, pre-prints, reading seminars, public writing, book reviews, course reviews, data management practices, ethical practices etc. are some of the other outputs from a research active colleague and student. RMC will widen the scope of academic excellence and recognize the roles and contributions of colleagues and students.

Make EEC the best place to pursue a career:

An appropriate support environment for conducting research and career development recognizes, supports and values the efforts and endeavours of the colleagues in their chosen career path. RMC will ensure there is clarity on how research can be incorporated in the academic duties and personal career goals. Communication and consistency in what is communicated will be implemented. This requires induction to align on expectations and career path. RMC will also be responsible for providing necessary training to create expertise and increase capacity.

• Raise the level of interaction with the community:

Visibility of students and colleagues and their research pursuits improves the profile of the college and the individual. RMC will encourage engagement with wider audience, not limited to those in the engineering discipline. Transparency and openness in how research is conducted, communicated and shared will only improve the reputation of the researcher and therefore the institution One example is making observation/field data available to the public. Colleagues will be encouraged and supported to organize conferences and other academic events either physically or virtually. They will be encouraged to increase their digital footprint (e.g. academic blogs). This can be especially advantageous to those who are starting on their academic career path.

Ensure research autonomy and flexibility:

A key advantage of doing research in an academic institution rather than commercial organization is the degree of research autonomy. RMC will ensure that students and colleagues have the freedom to pursue the work that they think is interesting and worthwhile. It is almost always possible to find use in the real-world for any good research and freedom of choice ensures people are happy and stay motivated. Autonomy needs to be accompanied by flexibility over the work which is also more possible in an academic institution where teaching and administrative load can be adjusted. RMC will help formulate research/academic policies that values and encourages autonomy and creates freedom that leads to students and colleagues producing their best work rather than trying to game the system such as publishing in journals that are not peer-reviewed and producing research that are without rigour.

4. Strategic Priorities

- Cultivate a habit and a culture of research where research is carried out, discussed and shared.
- Ensure the delicate balance between research time and other responsibilities is maintained through workload management guidelines.

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- Ensure students have access to learning and development programmes within their departments and through RMC.
- Create provisions and provide support for formation and operation of special interest groups and research collective that is a mix of colleagues and students.
- Provide guidelines and training to write journal articles, research proposals and grant applications.
- Provide guidance on how research and research outputs can be used in classroom teaching and to deliver on the objectives of the curriculum.
- Ensure there is engagement between senior colleagues with colleagues starting in their career to share their experience and expertise pertaining to research and academic excellence.
- Develop guidelines and protocols for the utilization of seed funds to carry out research and improve collegiality and collaboration amongst the research community.
- Promote cross-department and cross-institutional discussion and networking.
- Explore innovation with collaboration and tie-ups between institutions from industry, academic, government and civil society.

5. Implementation Key Considerations

- Wherever appropriate the plans for building the research culture developed by the RMC will learn from best practices in colleges/schools affiliated with Pokhara University, other academic institutions within and outside of Nepal and tailor to the EEC context. The idea is to avoid reinventing the wheel unless none fits the requirements.
- The research plans and actions will not be fully prescriptive, allowing it to adapt and respond appropriately to progress, new ideas and new scenarios. This is especially needed when the research culture is being built from the ground up.

6. Action Plan

- Grow library collections, enhance laboratories, and other core facilities to improve EEC's research profile and cater to faculty's research interest and reflect research priorities set by the RMC.
- Target research based on individual faculty strengths and inter-disciplinary and multidisciplinary strengths.
- Engage students in research diversification efforts and provide opportunities for all students to participate in research.
- Develop strategy to build working relationship, collaborations and partnership with the industry, government, philanthropic and community-based organizations.
- Create research mentoring efforts that pair senior faculty members with new faculty members and faculty members with student's special interest groups and research collective.
- Create means to expose first-year students to research and research fields that they are likely to be involved with in later years.
- Build digital repositories to share and preserve research resources, outputs, lectures, seminars and training videos.
- Focus on enhancing library to support research, creative work and scholarship.

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- Review current research practices, teaching practices, student projects, infrastructure and needs.
- Develop research workshops and short courses that have value across departments.
- Circulate funding opportunities and publicize completed research projects and outputs.
- Develop implementation plan for student-led and faculty-mentored special interest groups and faculty research groups.
- Support workload plan creation in the departments and advise management units to create research time.

7. Structure of the RMC

For the operation of the research management, an executive committee comprising of five members from three different departments will be formed. Priority will be given to faculty members with higher education and research experience as demonstrated by their publication record. The overall structure of RMC will have the following groups/committee:

a) Executive Committee

The executive committee will be formed as per the directives provided by Pokhara University Research Centre. The RMC executive committee at EEC will have five members: RMC Head and four RMC Members selected from the academic departments. The members will be selected based on the following criteria:

- RMC Head: Faculty with a PhD and track record of publication in peer reviewed journals
- RMC Members: selected based on the following preference
 - Faculty with a PhD or currently enrolled in a PhD will be given priority
 - Faculty who have completed Masters with a published thesis
 - Faculty currently enrolled in a Masters programme

The executive committee will at least have one member from each of the four academic departments currently at EEC. The tenure of the executive committee members will be for two years with the possibility of re-appointment for another tenure.

b) Sub-coordination group

The role of this group will be to closely monitor various initiatives started by the RMC in their respective departments. Faculty members identified by the RMC executive committee will be the members of this group. They will assess the progress and report the problems that are being faced to the RMC. The sub-coordination group will comprise of two to four members and represent the different academic departments.

The sub-coordination committee will have a tenure of two years with the possibility of re-appointment for another tenure.

c) Advisory board

To discuss on wider issues related to research and implementation of strategic objectives, RMC will consult the Research Committee. This committee will include following members who can be called upon as needed to provide advice on matters pertaining to long-term goals of the RMC.

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- Chairperson Appointed faculty member or Executive Head of EEC
- Members Two to four members (considering the faculty, department, and gender-wise inclusiveness)
- Member secretary Head of the Research Management Cell

d) Student member

Students that demonstrate academic excellence, inclination to research and possess skills required to contribute to research work can be appointed as the student member. The student members will benefit by mentoring from the RMC executive committee. They will have the opportunity to attend and contribute to RMC's meetings. Student members gain better insight of how research is imagined, executed, managed and supported inside the academic ecosystem and in the industry.

8. Operation of the RMC

RMC will function in a way that contributes to the ethos of a research culture and lays a strong foundation for contribution to the society through research. RMC will perform its function according to the guidelines set in this document. The guidelines and procedures will be reviewed periodically and updated as necessary. For smooth operation of the RMC, the following procedures will be followed:

- a) All executive members will be provided with an RMC ToR by the responsible department or committee or board.
- b) RMC will hold a meeting at least once every month. Executive members, members of the advisory board and student members will attend the meeting. Other person can be invited to attend the meeting when necessary.
- c) Special meetings and emergency meetings can be called the RMC Head in case of need for urgent decision by the RMC committee.
- d) Advisory board will meet at the request of the RMC. Members from the advisory board can be invited to attend the regular RMC meetings.
- e) Minutes of the meetings will be recorded. One member from the executive committee will be appointed by the RMC Head to take the minutes and file it.
- f) Decisions made by the RMC, other than confidential information, will be available to EEC students and faculty to ensure transparency.
- g) Decision will be reached after allowing time for thought and adequate preparation time.
- h) The operational guidelines will be reviewed and may be revised or changed at a minimum of once every two years.

9. RMC Executive Committee Members

The executive committee consisting of five members has been formed adhering to the "Research Management Cell Guidelines 2024" prepared by Pokhara University. Members including the head will be appointed for two years with the possibility of re-appointment for another tenure. The members of the committee are as follows:

- Dr. Shailesh Bahadur Pandey (Professor, Computer, IT & Software Engineering, Head) shailesh.pandey@eemc.edu.np
- Er. Tripti Mahaseth [Senior Lecturer, Computer, IT & Software Engineering, Member]
- Er. Anil Thapa [Assistant Senior Lecturer, Computer, IT & Software Engineering, Member]