Final Year Major Project Identification and Allocation Procedure

The philosophy of Undergraduate final year major project is it should ensure that students have comprehended the various concepts/techniques they have learnt during their program of study and develop a product / software that has reasonable relevance to the societal needs.

Towards this end,

- Head of the department shall issue a circular to all faculty requesting them to identify projects / research problems that have direct strong correlation and relevance to Program Outcomes (POs) and / or Program Specific Outcomes (PSOs).
- The circular is to be issued during the penultimate week of the second semester of the academic year for the projects to be executed in the second semester of the subsequent academic year (i.e. circular to be issued in the last but one week of III year II semester).
- This shall ensure all faculty spend considerable time in identifying the projects/research problems.
- Faculty are expected to suggest the projects/research problems NOT later than the fourth
 week of the first semester of academic year while projects are to be executed in the second
 semester of the corresponding academic year.

While suggesting projects faculty must ensure submission of the following:

- 1. Title of the project/research problem
- 2. Methodology to be adopted for the execution of the project/research problem
- 3. Relevant theoretical background with suggested references
- 4. Specifications of the hardware/software/equipment requirements
- 5. A monthly timeline for the completion various modules of the project with expected deliverables

Projects may be broadly categorized in the following ways:

Industry Sponsored Projects: Under this category, the project is to be executed in an industry to fulfill the needs of industry, which ensures availability of resources for the completion of the project. In this case, students approach various industries for the final year projects and work on the same once it has been approved by the department and the project coordinator allocates a supervisor as per the recommendation of the project evaluation committee of the department.

Institute Sponsored Projects: Under this category, project is executed by a group of students, wherein the project is assigned by a faculty member of the department. In this case, the college

provides all resources for the completion of the project. In this situation, faculty members specify in-house projects along with title(s) / statements and interested students approach them. Once mutually decided between faculty and students, it shall be approved by the department project coordinator and students start working on the same. These project title(s)/statements are categorized specialization/domain wise and the corresponding group Heads help the faculty members who in turn guide students and ensure execution of the same within the stipulated period.

A further detailed classification of projects may be done based on the following categories:

Application Oriented: In this category, projects are performed where the target is to achieve any real-time/life application. In this category, design and soldering/fabrication of various components is minimal as most of the components are available on the shelf, which are essentially assembled together and the product is delivered.

Design Oriented: In this category, design soldering/fabrication of various components is NOT minimal and students spend considerable time doing from the scratch/foundation. In this category, at least one iteration of design, soldering/fabrication of various components and testing them and as per the test results students modify the design and complete the project by delivering the end product.

Research Oriented: In this category, extensive review of literature is done, which aims to learn new methods / techniques or procedures and validate the results.

Following factors are considered (but not limited) to classify projects in above categories:

- 1. Environment
- 2. Safety
- 3. Standards
- 4. Cost

Project Allocation and Review in the First Semester

- Allocation of projects must be completed before the completion of the eighth week of the first semester of the corresponding academic year.
- A time table shall be given to all students and their project guides/supervisors by the
 department project coordinator and students are expected to carry out the required ground
 work and present the same to the project review committee as per the time-table so that they
 start execution of the project from day ONE of the second semester.

• At the end of the first semester students must have presented their work to the guide and the project review committee.

Continuous Monitoring Mechanism and Evaluation

- Weekly meetings of the students with respective guide/supervisor shall be held on the project (a common day for all students and all students must attend the same).
- Students/faculty must maintain the log book of weekly meetings and faculty must sign the same with a copy marked to the HoD.
- At the end of each month, the work done is presented by students and progress shall be evaluated by the department project review committee.

Methodology to assess individual as well as collective contribution/understanding of the project

- Evaluation sheet is to be distributed by the project coordinator to all the members of the project review committee.
- Evaluation is to be carried out on individual basis as well as on team performance and is to be communicated to the students for further improvement.
- At the end of the academic year, students present and demonstrate their work to the project review committee.

Publication / Presentation of the Project Work Carried Out to External Agency

- Every project group is to be encouraged to write a paper or to participate in project competition organized by IITs/NITs/BITS/University Colleges.
- Students are to be provided with the 'research article formats' of various conferences and / or journals.
- The project supervisor and the corresponding group head shall facilitate the students writing a paper to a journal or a conference.

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