

# CO – PO & PSO ASSESSMENT AND ATTAINMENT PROCESS MANUAL

## Vision

"To strive to become one of the top ten universities in India, in next 20 years, in terms of academic advancement, research progressiveness and infrastructural development and also in the area of uplifting and sustainable implementation of the pro-socio concepts such as social justice, equity and access through higher educational practices".

## Mission

- Strengthening the academic advancement with the global competitiveness.
- Imparting need based updated curriculum.
- Provide congenial ambience on the campus.
- Provide industry/corporate exposure to the students.
- Establishing the strong research practices among faculty and students.
- Encouraging students for field-based learning and also to address the social issues with the help of soft skills more rationally.
- Develop the determination to achieve a sustainable development in the areas of social justice, equity and access.

### **Program Outcomes (POs):**

**Program outcomes** describe what students are expected to know and would be able to do by the time of graduation. These relate to the skills, knowledge, and behaviours that students acquire as they progress through the program.

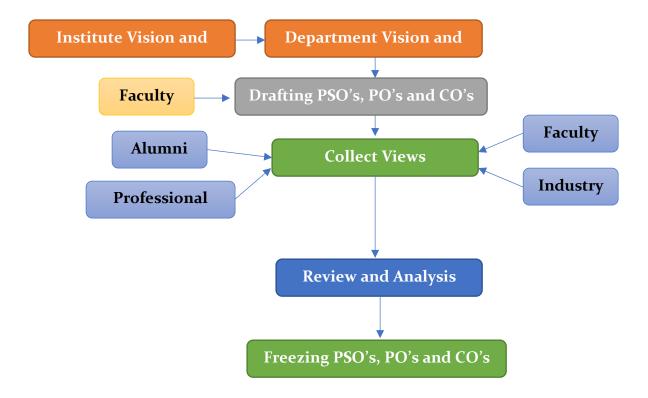
### **Program Specific Outcomes (PSOs):**

**Program Specific Outcomes** are statements that describe what the graduates of a specific engineering program should be able to do.

#### **Course Outcomes (COs):**

Statements indicating what a student can do after the successful completion of a course. Every Course leads to some Course Outcomes. The CO statements are defined by considering the course content covered in each module of a course. For every course there may be 4 or 5 CO's. The keywords used to define COs are based on Bloom's Taxonomy.

PO, PSO and CO publishing and dissemination How Published	Where Published	How Disseminated
Incorporating in booklet given in orientation, syllabus book, course files and lab manuals	<ul> <li>Syllabus books</li> <li>Course files and lab manuals</li> <li>Laboratories in the departments</li> </ul>	<ul> <li>Distribution and explanation to students on orientation day</li> <li>Discussed during student Counselling</li> <li>Distributed along with Syllabus books, course files and lab manuals</li> </ul>
Flexis	<ul> <li>Class rooms/ Laboratories</li> <li>Office of the department</li> <li>Department Notice boards</li> </ul>	Self-reading by students, parents and alumni
Digital Media	Institute Website http://davangereunivers ity.ac.in/syllabus	Available for Self-reading in public domain



Process to Define PSO's, PO's and CO's of the Department

## Procedure for attaining CO's, PO's and PSO's

- Departmental committee will finalize course outcomes for each course after the series of discussions with all the faculty of the department.
- Procedure for attainment of COs:

Course outcomes will be attained through direct and indirect methods.

- ➤ **Direct Attainment:** We will consider the following criteria in the direct Attainment
  - Continuous Assessment: COs are assessed through Sessional & Assignment Examinations, Home Assignments and Lab records. The COs are mapped against each question and CO analysis is carried out by faculty for each course and documented in Faculty Course Assessment Report (FCAR). The contribution of COs are assessed in high, moderate and low levels, towards the attainment of POs/PSOs.
  - Semester-end Theory Examinations: The questions in semester-end examinations are tested pertaining to all COs, in varying Blooms Taxonomy Levels.
  - Laboratory Records: Both continuous and semester-end examinations are conducted to test the COs attainment.
- ➤ **Indirect Attainment:** In this method, we consider the feedbacks of students, parents, alumni and parents on the framed questionnaires.
  - Programme Exit survey: This survey taken from the final year students at the completion of their B.Tech programme, stands as the comprehensive feedback for the PO/PSO assessment

- Alumni Survey: This survey is conducted annually through Google link or mail with the Alumni to obtain the inputs and suggestions on PO attainment in the real time societal environment
- **Employer Survey:** This survey is taken from the employer to measure the PO attainments.
- In addition, the institution takes the Placement record and higher education details of the students as supporting evidences for the assessment of POs.

#### Mechanism for the attainment of CO:

The student performance in continuous assessment exams is verified for each question.

$$\begin{aligned} \textit{CO Assessment (Direct)} &= \frac{\text{Number of students reached in answering the question}}{\text{Number of students attempted the question}} \\ &= \frac{\textit{CO Assessment (InDirect)}}{\text{Sum of Students response reached the expected level in answering the survey}}{\text{Number of students responded}} \end{aligned}$$

In view of the threshold assumed for each course, individual course assessment is thus calculated.

