

**PEOs-POs/PSOs and CO**  
**Formulation, Assessment and Attainment**  
**Extract of Policy – 2017**  
**(Revised & Updated 2019)**

DIT University – an institution of higher learning, encouraging innovation and creativity amongst our students. The University is designed to provide holistic education, enabling students to stand on their own feet. The focus is always on promotion of self-learning and honing talents to ensure the all-round development amongst our students.

## **DIT University Guiding Principles**

### **Our Vision**

To be a world class professional University, constantly striving for excellence in education by high quality teaching in synchronization with the industry needs. To be driven by the spirit of ground breaking research and entrepreneurship. To instill each student qualities of mind and character necessary for good citizenship and wise leadership.

### **Our Mission**

To put our students first and work responsibly with honesty, transparency and integrity to influence, inspire and nurture talent for our students, and the members of faculty and staff. To encourage creative ability and research temperament. To provide knowledge based technological services for industry and society. To synergize the teaching learning process through active interaction with industry and academia whilst embracing modern technological changes.

### **Our Core Values**

- Academic excellence and integrity.
- Outstanding teaching and service.
- Encourage quest of life-long learning.
- Scholarly research and professional leadership.
- Inculcating global perspective in attitude.
- Appreciation of intellectual excellence and creativity.
- Sensitivity to social responsibility.
- Integration of human values, ethics and professional etiquettes with teaching.

### **Outcome-based Education**

DIT University endeavors to follow the Outcome-based education form 2017 batch and onwards under the choice base credit system (CBCS) curriculum across all programs offered. It is targeted at achieving desirable outcomes (in terms of knowledge, skills, attitudes and behavior) at the end

of a program. Teaching with this awareness and making the associated effort constitutes outcome-based education. This entails a regular methodology for ascertaining the attainment of outcomes, and benchmarking these against the program outcomes, consistent with the objectives of the program.

### **OBE Framework**

1. Identify & define the learning outcomes at all levels and explicitly document the same in the curriculum.
2. Organizing the teaching and learning activity through student – centered activity and project base learning.
3. Assessment and evaluation at all levels of learning outcomes i.e. PEOs , POs and COs

### **Establishment of Department’s Vision and Mission Statements**

In consonance with the University Vision and Mission statement, each academic department of the university are to formulate the department’s vision an mission statement after deliberation with respective faculty members, industry experts, alumni and parents followed by discussion with BOS members.

### **Establishment of Program educational objects, Program outcomes and Program Specific outcome.**

In consistent with department vision and mission statement, the respective heads of department prepare the PEOs, and POs after due deliberation with all stake holders and finalize the same through departmental academic affairs committee (DAAC) and BOS.

#### **Program Educational Objectives (PEOs):**

Program educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

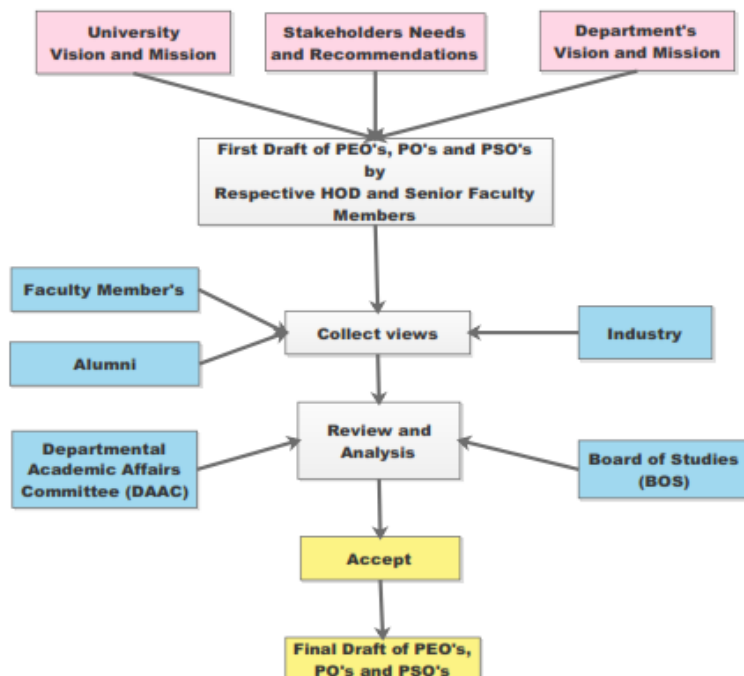
#### **Program Outcomes (POs):**

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 behaviors 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/professional program should be able to do.

### Process Flow of PEO's, PO's and PSO's Formulation



### Publishing and dissemination of PEOs and POs/PSOs

After finalization of PEOs and POs/PSOs the respective departments are publishes and disseminate these statement among all the stakeholders through the following medium.

1. University website
2. Display in the various class rooms and laboratories.
3. Student handbooks
4. Departmental office and notice board
5. Course file and lab manual

### Setting up the Course Learning Outcomes

In consistent with POs/PSOs the course coordinator of a particular course are formulating the course learning outcomes. These 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 5 or 6 COs. The keywords used to define COs are based on Bloom's Taxonomy.

### **Method of measuring attainment of Program Outcomes (PO), Program Specific Outcomes (PSO), and Course Outcome (CO):**

DIT University has adopted a following method of calculation of attainment of POs, PSOs, COs.

#### **I. Method of calculation of attainment of COs.**

Each course of a programme have well-defined COs. Attainment of COs is calculated using a combination of direct methods of assessment and indirect method of assessment.

**Direct Assessment:** Direct method of assessment have two major components:

1. Continuous Evaluation (CE) (Assignments, Quizzes, Class Test, Laboratory performance, Mid-term examination etc.).
2. End Term Examination (ETE).

Weightage of CE and ETE is **50%-60%** and **40%-50%** respectively depending on course and programme.

**Indirect Assessment:** Indirect method of assessment of COs is based on course exit survey performed at the end of the semester/trimester/annual.

##### **a) Direct Assessment:**

Direct assessment of COs is based on performance of students in various components of the performance evaluation. The performance is categorized in four levels: 0 (Not satisfactory), 1 (Average), 2 (Good), 3 (Excellent).

**Setting target for attainment level of performance:** Targets are set various level of performance as follows:

**Level 3:** 80% or more students attain more than 60% marks (or 6 out of 10 point grades) **(Threshold)** in a direct assessment method.

**Level 2:** 65% or more students attain more than 60% marks (or 6 grade) in a direct assessment method.

**Level 1:** 50% or more students attain more than 60% marks (or 6 grade) in a direct assessment

method.

**Level 0:** less than 50% students attains more than 60% marks (or 6 grade) marks in a direct assessment method.

**Note:** *If target level of attainment is achieved in current year, threshold is increased for next year. Moreover, different thresholds may be set for different level as well as differences courses.*

**b) Indirect Assessment of COs:**

Indirect assessment of COs is performed using course exit survey (feedback) conducted in the end of the semester. Students are asked to rate course on a scale of 5. The components of COs attainment is set as follows:

**Level 3:** 70% or more students (participating) give 3.5 (**Threshold**) or more points

**Level 2:** 65% or more students (participating) give 3.5 or more points

**Level 1:** 60% or more students (participating) give 3.5 or more points

**Level 0 (No Attainment):** less than 60% students (participating) give 3.5 or more points

**Indirect Assessment:** Indirect assessment of POs is performed using programme exit survey, employer's feedback, alumni survey.

**Programme exit survey:** Programme exit survey is conducted after completion of programme. Students are asked to rate programme on a scale of 5. The components of POs attainment is set as follows:

**Level 3:** 70% or more students (participating) give 3.5 (**Threshold**) or more points

**Level 2:** 65% or more students (participating) give 3.5 or more points

**Level 1:** 60% or more students (participating) give 3.5 or more points

**Level 0 (No Attainment):** less than 60% students (participating) give 3.5 or more points

**Employer's feedback:** A feedback is taken during campus visits of companies for placement. Companies are asked to give feedback about talent of current students (participating) and previous students (employed). Companies rate student in the categories: Below Average (0), Average (1), Good (2), Excellent (3). The components of POs

attainment is set as follows:

**Level 3:** 80% or more companies rating 2 or more points.

**Level 2:** 70% or more companies rating 2 or more points.

**Level 1:** 60% or more companies rating 2 or more points.

**Level 0 (No Attainment):** Less than 60% or more companies rating 2 or more points.

**Alumni feedback:** Use a criteria similar to Employer's feedback for calculation of level of attainment of Alumni feedback.

**Level of PSOs attainment:** It is calculated in similar manner as POs calculation is performed.

### **Analysis of Outcomes & Subsequent Documentation**

Heads of department and course coordinator must consolidate this process and attainment at the end of each academic year. It must be documented with analysis and presented before the Academic Committee constituted by the Vice Chancellor.

The attainment at PO level (end of every passing out course) must be graded.