

## **Standard Operating Procedure (SOP) regarding the COs and POs of Major and Mini Projects**

### **Mechanical Engineering**

#### **B.E. Major Project**

There are six COs in the university syllabus, and these six COs have mapped with the PO1, and PO4 to PO12. Hence, it is found that there are no COs in the syllabus that can be mapped with some POs, i.e., PO2 and PO3. Hence, it is needed to add the following two COs so that it can be mapped with the above mentioned POs.

CO7: Students will be able to conduct the literature survey.

CO8: Students will be able to design the components, systems, or processes considering safety and health.

#### **T.E. Mini Project (2A and 2B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO5. It is found that there is no COs in the syllabus that can be mapped with PO5. Hence, it is needed to add the following COs so that it can be mapped with the above mentioned POs or PO5.

CO7: Students will be able to use the modern tools to give the solution to the problem.

#### **S.E. Mini Project (1A and 1B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO5. It is found that there is no COs in the syllabus that can be mapped with PO5. Hence, it is needed to add the following COs so that it can be mapped with the above mentioned POs or PO5.

CO7: Students will be able to use the modern tools to give the solution to the problem. This CO is going to be mapped with the PO5.

### **Chemical Engineering**

#### **B.E. Major Project**

In the university syllabus, there are six COs, and these six COs have mapped with PO1 to PO7 and PO10. Hence, It is found that there are no COs in the syllabus that can be mapped with some POs, i.e., PO8, PO9, PO11, and PO12. Hence, it is needed to map the above-mentioned POs, with some additional COs.

#### **T.E. Mini Project (2A and 2B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO7. It is found that there are no COs in the syllabus that can be mapped with PO7. Hence, it is needed to add the following COs so that it can be mapped with the PO7.

CO7: Students will be able to give the solution to the problem considering the needs of society or the environment.

### **S.E. Mini Project (1A and 1B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO5. It is found that there is no COs in the syllabus that can be mapped with PO5. Hence, it is needed to add the following COs so that it can be mapped with the above mentioned POs or PO5.

CO7: Students will be able to use the modern tools to give the solution to the problem. This CO is going to be mapped with the PO5.

## **Computer Engineering**

### **B.E. Major Project**

In the university syllabus, there are six COs, and these six COs can be mapped with PO4 to PO12.

Hence, it is found that there are no COs in the syllabus that have mapped with the above mentioned POs, i.e., PO1, PO2, and PO3. Hence, some additional COs are required to be designed and added, so that it can be mapped with the above-mentioned POs.

CO7: Students will be able to conduct the literature survey.

Hence, the above-mentioned COs, i.e., CO7, is going to be mapped with the PO2.

### **T.E. Mini Project (2A and 2B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO8. It is found that there are no COs in the syllabus that can be mapped with PO8. Hence, it is needed to add the following COs so that it can be mapped with the PO8.

CO7: Students will be able to use standard norms of engineering practices and apply ethical principles.

### **S.E. Mini Project (A and B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO5. It is found that there is no COs in the syllabus that can be mapped with PO5. Hence, it is needed to add the following COs so that it can be mapped with the above mentioned POs or PO5.

CO7: Students will be able to use the modern tools to give the solution to the problem. This CO is going to be mapped with the PO5.

## **Electronics and Telecommunication Engineering**

### **T.E. Mini Project (2A and 2B)**

There are six COs in the university syllabus, and these six COs have mapped with POs, i.e., PO1 to PO6, PO10, and PO11. It is found that there are no COs in the syllabus that can be mapped with PO7, PO8, PO9, and PO12.

Hence, it is needed to add the following tentative COs so that it can be mapped with the POs, i.e., PO8, PO9, and PO12.

CO7: Students will be able to give the solution to the problem considering the need of the society or environment. This CO is going to be mapped with the PO7.

CO8: Students will be able to use standard norms of engineering practices and apply ethical principles. This CO is going to be mapped with the PO8.

### **S.E. Mini Project (1A and 1B)**

There are six COs in the university syllabus, and these six COs have mapped with POs, i.e., PO1 to PO5. It is found that there is no COs in the syllabus that can be mapped with PO6 to PO12.

Hence, it is needed to add the following tentative COs so that it can be mapped with the POs, i.e., PO6 to PO12.

CO7: Students will be able to identify the problems based on societal/research needs. This CO is going to be mapped with the PO6.

CO8: Students will be able to identify impact of solutions in societal and environmental context for sustainable development. This CO is going to be mapped with the PO7.

CO9: Students will be able to use standard norms of engineering practices and apply ethical principles. This CO is going to be mapped with the PO8.

## **Civil Engineering**

### **B.E. Major Project**

In the university syllabus, there are six COs, and these six COs have mapped with PO1 to PO4, PO6 and, PO9 to PO11. Hence, it is found that there are no COs in the syllabus that can be mapped with the POs, i.e., PO5, PO7, PO8, and PO12. Hence, it is required to add some additional COs so that it can be mapped with the above-mentioned POs.

CO7: Students will be able to use the modern tools effectively during the implementation of the solution to the problem. This CO is going to be mapped with PO5.

### **T.E. Mini Project (2A and 2B)**

There are six COs in the university syllabus, and these six COs have mapped with POs, i.e., PO1 to PO6. It is found that there is no COs in the syllabus that can be mapped with the remaining POs, i.e., PO7 to PO12.

Hence, it is needed to add the following tentative COs so that it can be mapped with the POs, i.e., PO8, PO9, and PO12.

CO7: Students will be able to give the solution to the problem considering the need of the society or environment. This CO is going to be mapped with the PO7.

CO8: Students will be able to use standard norms of engineering practices and apply ethical principles. This CO is going to be mapped with the PO8.

CO9: Students will be able to develop interpersonal skills to work as member of a group or leader. This COs is going to be mapped with the PO9.

CO10: Students will be able to excel in written and oral communication: This COs is going to be mapped with the PO10.

**S.E. Mini Project (1A and 1B)**

There are six COs in the university syllabus, and these six COs have mapped with all the POs except PO5. It is found that there is no COs in the syllabus that can be mapped with PO5. Hence, it is needed to add the following COs so that it can be mapped with the above mentioned POs or PO5.

CO7: Students will be able to use the modern tools to give the solution to the problem. This CO is going to be mapped with the PO5.



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