SENIOR DESIGN PROJECT
GUIDELINES AND REGULATIONS
Contents

1. Eligibility .................................................................................................................................................. 1
2. Group Formulation .................................................................................................................................. 1
3. Senior Design Project – 0 (SDP-0) ........................................................................................................ 1
4. Senior Design Project – 1 (SDP-1) .......................................................................................................... 1
5. Senior Design Project – 2 (SDP-2) .......................................................................................................... 2
6. Senior Design Project Committee ......................................................................................................... 2
7. Role of Supervisor .................................................................................................................................. 2
8. Report Format .......................................................................................................................................... 2
9. OBE – Distribution Template ................................................................................................................ 2
10. Assessment ............................................................................................................................................ 3
11. Annex ..................................................................................................................................................... 3
1. **Eligibility**
   - Cleared courses up to 6th Semester

2. **Group Formulation**
   - Maximum number of group members = 3
   - Member formulation shall be described on SDP Consent Form (Annex A)

3. **Senior Design Project – 0 (SDP-0)**
   Students are allowed to work on and present a project synopsis under Senior Design Project – 0 (SDP-0) once they have cleared all the courses mentioned in the eligibility section-1.
   Throughout the sixth semester, students will come up with a problem statement and proposed solution by the end of the semester. It is expected that students cover up to 25% of the PLOs (Refer to Figure 1).

![Flowchart](image)

Figure 1: Senior Design Project – 0 (SDP-0) submission process

4. **Senior Design Project – 1 (SDP-1)**
   Students will commence their project according to the timeline proposed/approved in SDP-0. Students are expect to conduct a thorough literature review and complete up to 50-60% of their work (refer to Figure 2).

![Flowchart](image)

Figure 2: Senior Design Project – 1 (SDP-1) process flow
5. Senior Design Project – 2 (SDP-2)

Student will complete the remainder of their project (Figure 3).

![Process Flow Diagram]

Figure 3: Senior Design Project – 3 (SDP-1) process flow

6. Senior Design Project Committee

The Senior Design Project Committee shall be comprised of minimum:

- HoD or Dean (or both)
- At least 1 PhD Faculty
- Project Supervisor
- SDP Coordinator

7. Role of Supervisor

- Coordinate with SDP Coordinator to arrange mid-term and final evaluation
- Guide students to conduct experiments/project and write-up
- Suggest improvements and corrections (if any) throughout the SDP timeline.
- Ensure timely completion of the project as per SDP timeline
- Record weekly progress report of the group and highlight behavior of each individual in the group (Annex D)

8. Report Format

- Reports submitted for SDP-0, SDP-1 and SDP-2 shall follow the SDP approved format. (Annex B and Annex C)

9. OBE – Distribution Template

The distribution of Senior Design Project PLOs is shown in Table:
Table 1: Senior Design Project PLOs Distribution

<table>
<thead>
<tr>
<th>S.No.</th>
<th>PLOs</th>
<th>SDP stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Engineering Knowledge</td>
<td>SDP- 1</td>
</tr>
<tr>
<td>2</td>
<td>Problem Analysis</td>
<td>SDP- 1</td>
</tr>
<tr>
<td>3</td>
<td>Design/Development of Solutions</td>
<td>SDP- 2</td>
</tr>
<tr>
<td>4</td>
<td>Investigation</td>
<td>SDP- 1</td>
</tr>
<tr>
<td>5</td>
<td>Modern Tool Usage</td>
<td>SDP- 2</td>
</tr>
<tr>
<td>6</td>
<td>The Engineer and Society</td>
<td>SDP- 1</td>
</tr>
<tr>
<td>7</td>
<td>Environment and Sustainability</td>
<td>SDP- 1</td>
</tr>
<tr>
<td>8</td>
<td>Ethics</td>
<td>SDP- 2</td>
</tr>
<tr>
<td>9</td>
<td>Individual and Teamwork</td>
<td>SDP- 1</td>
</tr>
<tr>
<td>10</td>
<td>Communication</td>
<td>SDP- 2</td>
</tr>
<tr>
<td>11</td>
<td>Project Management</td>
<td>SDP- 2</td>
</tr>
<tr>
<td>12</td>
<td>Lifelong Learning</td>
<td>SDP- 2</td>
</tr>
</tbody>
</table>

10. Assessment
   - Weekly Progress Report (Annex D)
   - Mid-Semester Presentation & Evaluation (Progress)
   - Final Presentation & Evaluation (Defense)
   - Hard Copy of Report

11. Annex
   A. SDP Consent Form (Annex A)
   B. Proposal Submit Form (Annex B)
   C. Report Format(Annex C)
   D. Weekly Progress Report (Annex D)