

BTEC L3 Engineering Unit 6 – pre-planning

Planning for the BTEC L3 Engineering Unit 6 is dictated by the 12 hour supervised assessment period and your college timetable. Taking clues from Pearson’s Sample Assessment Material (the egg timer task) and assuming the timetable allows 2 x 1½ hour sessions per day over 4 days, this is my first attempt at a pre-planning document.

| Monday | | | Tuesday | | | Wednesday | | | Thursday | | |
|-------------------------|-----------------------|-------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|--|-----------------------|-------------------------|--|
| Session 1 90 minutes | B R E A K | Session 2 90 minutes | | B R E A K | | B R E A K | | | B R E A K | | |
| | | | Session 3 90 minutes | | Session 4 90 minutes | | | | | | |
| | | | | | Session 5 90 minutes | | Session 6 90 minutes | | | | |
| | | | | | | | Session 7 90 minutes | | | Session 8 90 minutes | |

Using the “Sample Assessment Materials (SAMs) Issue 2”

| Assignment Stage | Description | Suggested time | Suggested time in minutes |
|------------------|---|--------------------|---------------------------|
| Activity 1 | Task planning and system design changes | 1 hour 30 minutes | 90 mins |
| Activity 2 | Analysis of brief | 1 hour 20 minutes | 80 mins |
| Activity 3 | System design | 2 hours 25 minutes | 145 mins |
| Activity 4 | System assembly and programming | 2 hours 25 minutes | 145 mins |
| Activity 5 | System testing and result analysis | 1 hour 20 minutes | 80 mins |
| Activity 6 | System in operation | 3 hours | 180 mins |
| Cross Check | Total (Cross Check) | 12 hours | 720 mins (12 hours) |

Strategy:

Use the first 10 minutes of each session for ‘Activity 1 Task planning and system design changes’ using up 80 minutes. Add the remaining 10 minutes to the last session (Session 8) to collate and check all paperwork.

Activity 2 - Analysis of brief is autonomous and needs to be performed in one continuous operation.

Activities 3, 4 and 5 - System design, System assembly and programming, System testing and result analysis need to run almost in parallel to some extent.

Activity 6 - System in operation – should be more or less autonomous if all goes well.

Session by Session (first attempt) planning

| Session 1 | |
|---|-------------------|
| Activity 1 | Activity 2 |
| Task planning and system design changes | Analysis of brief |
| 10 minutes | 80 minutes |

| Session 2 | |
|---|--|
| Activity 1 | Activity 3 |
| Task planning and system design changes | System design |
| 10 minutes | 80 minutes (145 mins allocated, 80 minutes used, so 65 minutes remaining) |

| Session 3 | | |
|---|---|-------------------|
| Activity 1 | Activity 4 | Activity 3 |
| Task planning and system design changes | System assembly and programming | System design |
| 10 minutes | 15 minutes (145 mins allocated, 15 minutes used, so 130 minutes remaining) | 65 minutes |

| Session 4 | | |
|---|--|---|
| Activity 1 | Activity 4 | Activity 5 |
| Task planning and system design changes | System assembly and programming | System testing and result analysis |
| 10 minutes | 60 minutes (145 mins allocated, 75 minutes used, so 70 minutes remaining) | 20 minutes (80 mins allocated, 20 minutes used, so 60 minutes remaining) |

| Session 5 | | |
|---|---|---|
| Activity 1 | Activity 4 | Activity 5 |
| Task planning and system design changes | System assembly and programming | System testing and result analysis |
| 10 minutes | 40 minutes (145 mins allocated, 115 minutes used, so 30 minutes remaining) | 40 minutes (80 mins allocated, 60 minutes used, so 20 minutes remaining) |

| Session 6 | | | |
|---|---------------------------------|------------------------------------|---|
| Activity 1 | Activity 4 | Activity 5 | Activity 6 |
| Task planning and system design changes | System assembly and programming | System testing and result analysis | System in operation |
| 10 minutes | 30 minutes | 20 minutes | 30 minutes (180 mins allocated, 30 minutes used, so 150 minutes remaining) |

| Session 7 | |
|---|---|
| Activity 1 | Activity 6 |
| Task planning and system design changes | System in operation |
| 10 minutes | 80 minutes (180 mins allocated, 110 minutes used, so 70 minutes remaining) |

| Session 8 | | |
|---|---------------------|---|
| Activity 1 | Activity 6 | Activity 1 |
| Task planning and system design changes | System in operation | Task planning and system design changes |
| 10 minutes | 70 minutes | 10 minutes |