

GPA Calculation

Grades scored by a student

Semester 1:

| Course | C = Credit | Grade | G = Grade value | Credit Points C x G |
|--|------------|-------|-----------------|------------------------|
| ENGINEERING MATHEMATICS – I | 4 | A+ | 10 | 40 |
| ENGINEERING PHYSICS | 3 | A | 9 | 27 |
| MECHANICS OF SOLIDS | 3 | B | 8 | 24 |
| BASIC MECHANICAL ENGINEERING | 3 | C | 7 | 21 |
| COMMUNICATION SKILLS & HUMAN VALUES | 2 | D | 6 | 12 |
| BASIC ELECTRONICS | 3 | E | 5 | 15 |
| PHYSICS LAB | 1 | F | 0 | 0 |
| WORKSHOP PRACTICE | 1 | I | 0 | 0 |
| ENGINEERING GRAPHICS – I | 2 | A | 9 | 18 |
| TOTAL | 22 | | | 157 |

GPA Calculation

Semester 1:

| Course | C = Credit | Grade | G = Grade value | Credit Points C x G |
|--------------|---------------------|-------|-----------------|--------------------------|
| TOTAL | $\sum_1^n C_i = 22$ | | | $\sum_1^n C_i G_i = 157$ |

$$GPA_1 = \frac{\sum_1^n C_i G_i}{\sum_1^n C_i} = \frac{C_1 G_1 + C_2 G_2 \dots + C_9 G_9}{C_1 + C_2 + \dots + C_9} = \frac{157}{22} = 7.14$$

GPA Calculation

Grades scored by a student

Semester 2:

| Course | C = Credit | Grade | G = Grade value | Credit Points C x G |
|---------------------------------|------------|-------|-----------------|------------------------|
| ENGINEERING MATHEMATICS – II | 4 | A | 9 | 36 |
| ENGINEERING CHEMISTRY | 3 | A+ | 10 | 30 |
| PROBLEM SOLVING USING COMPUTERS | 3 | C | 7 | 21 |
| BIOLOGY FOR ENGINEERS | 3 | A | 9 | 27 |
| ENVIRONMENTAL STUDIES | 2 | E | 5 | 10 |
| BASIC ELECTRICAL ENGINEERING | 3 | D | 6 | 18 |
| CHEMISTRY LAB | 1 | A | 9 | 9 |
| PSUC LAB | 1 | B | 8 | 8 |
| ENGINEERING GRAPHICS – II | 2 | A | 9 | 18 |
| TOTAL | 22 | | | 177 |

GPA Calculation

Semester 2:

| Course | C = Credit | Grade | G = Grade value | Credit Points C x G |
|--------------|---------------------|-------|-----------------|--------------------------|
| TOTAL | $\sum_1^n C_i = 22$ | | | $\sum_1^n C_i G_i = 177$ |

$$GPA_2 = \frac{\sum_1^n C_i G_i}{\sum_1^n C_i} = \frac{C_1 G_1 + C_2 G_2 + \dots + C_9 G_9}{C_1 + C_2 + \dots + C_9} = \frac{177}{22} = 8.05$$

CGPA Calculation

$$CGPA = \frac{\sum_1^N C_i G_i}{\sum_1^N C_i} = \frac{\left(\sum_1^n C_i G_i \right)_{I SEM} + \left(\sum_1^n C_i G_i \right)_{II SEM}}{\left(\sum_1^n C_i \right)_{I SEM} + \left(\sum_1^n C_i \right)_{II SEM}}$$

$$CGPA = \frac{C_1 G_1 + C_2 G_2 \dots + C_{18} G_{18}}{C_1 + C_2 + \dots C_{18}} = \frac{157 + 177}{22 + 22} = 7.59$$

B.Tech students admitted in and after 2018-19, need to exclude grade point and credits of open elective courses for the calculation of GPA and CGPA.