SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD Department of Mechanical Engineering

I semester B. E. (Common to all Branches)

Physics cycle

| | | | Teachi | Teaching | | | Examination | | | | |
|-------------|----------|---|------------|----------|-------|---------|-----------------|-------|----------|--|--|
| Course Code | *Course | Course Title | L-T-P | CIE | Theor | y (SEE) | Practical (SEE) | | | | |
| | Category | | (Hrs/Week) | Credits | Max. | **Max. | Duration | Max. | Duration | | |
| | | | | | Marks | Marks | in Hrs. | Marks | In Hrs. | | |
| 21UMAC100 | BS | Engineering Mathematics-I | 2 - 2 - 0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UPHC100 | BS | Engineering Physics | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UEEC100 | ES | Basic Electrical Engineering | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UCVC100 | ES | Elements of Civil Engineering and Mechanics | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UMEC100 | ES | Elements of Mechanical Engineering | 2 - 0 - 0 | 2 | 50 | 50 | 2 | - | - | | |
| 21UHUC100 | HU | Functional English | 1 - 2 - 0 | 2 | 50 | 50 | 2 | - | - | | |
| 21UPHL100 | BS | Engineering Physics Lab | 0 - 0 - 2 | 1 | 50 | - | - | 50 | 2 | | |
| 21UESL100 | ES | Basic Engineering Skills Lab | 0 - 0 - 2 | 1 | 50 | - | - | 50 | 2 | | |
| 21UAEE1XX | AE | Ability Enhancement Course | 2- 0- 0 | 2 | 50 | 50 | 2 | - | - | | |
| Total | | 16 – 4 - 4 | 20 | 450 | 550 | | 100 | | | | |

- * BS- Basic science ES- Engineering Science HU- Humanities, languages and Management AE- Ability enhancement course
- ** Semester End Examination conducted for 100 marks will be reduced to 50 marks

Chemistry cycle

| | | | Teach | Teaching | | Examination | | | | | |
|-------------|---|------------------------------------|------------|----------|-------|--------------------|----------|-----------------|----------|--|--|
| Course Code | *Course | Course Title | L-T-P | | CIE | Theor | ry (SEE) | Practical (SEE) | | | |
| | Category# | Course Tive | (Hrs/Week) | Credits | Max. | **Max. Duration Ma | | Max. | Duration | | |
| | | | (HIS/WEEK) | | Marks | Marks | in Hrs. | Marks | In Hrs. | | |
| 21UMAC100 | BS | Engineering Mathematics – I | 2-2-0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UCYC100 | BS | Engineering Chemistry | 3-0-0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UECC100 | ES | Basic Electronics | 3-0-0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UCSC100 | ES | Problem Solving & Programming in C | 3-0-0 | 3 | 50 | 100 | 3 | - | - | | |
| 21UMGC100 | ES | Engineering Graphics | 2-0-0 | 2 | 50 | 50 | 2 | - | - | | |
| 21UCYL100 | BS | Engineering Chemistry Lab | 0-0-2 | 1 | 50 | - | - | 50 | 2 | | |
| 21UCSL100 | ES | Computer Programming Lab | 0-0-2 | 1 | 50 | - | - | 50 | 2 | | |
| 21UAEE1XX | AE | Ability Enhancement Course | 2-0-0 | 2 | 50 | 50 | 2 | - | - | | |
| 21UHUC101 | HU Society, Environment and Engineering | | 2 -0-0 | 2 | 50 | 50 | 2 | - | - | | |
| Total | | 17 - 2 -4 | 20 | 450 | 550 | | 100 | | | | |

^{*} BS- Basic science ES- Engineering Science HU- Humanities, languages and Management AE- Ability enhancement course

Elective Course:

| Course Code | Course Title | Credits |
|-------------|------------------------------|---------|
| 21UAEE100 | Biology for Engineers | 2 |

^{**} Semester End Examination conducted for 100 marks will be reduced to 50 marks

II semester B. E. (Common to all Branches)

Physics cycle

| | | | Teachi | ng | Examination | | | | |
|-------------|----------|---|------------|---------|---------------|-----------------|------------------|---------------|------------------|
| Course Code | *Course | Course Title | L-T-P | | CIE | Theor | ry (SEE) | Practi | cal (SEE) |
| | Category | | (Hrs/Week) | Credits | Max. Marks | **Max. Marks | Duration in Hrs. | Max. Marks | Duration In Hrs. |
| 21UMAC200 | BS | Engineering Mathematics-II | 2 - 2 - 0 | 3 | 50 | 100 | 3 | - | - |
| 21UPHC200 | BS | Engineering Physics | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - |
| 21UEEC200 | ES | Basic Electrical Engineering | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - |
| 21UCVC200 | ES | Elements of Civil Engineering and Mechanics | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - |
| 21UMEC200 | ES | Elements of Mechanical Engineering | 2 - 0 - 0 | 2 | 50 | 50 | 2 | - | - |
| 21UPHL200 | BS | Engineering Physics Lab | 0 - 0 - 2 | 1 | 50 | - | - | 50 | 2 |
| 21UESL200 | ES | Basic Engineering Skills Lab | 0 - 0 - 2 | 1 | 50 | - | - | 50 | 2 |
| 21UAEE2XX | AE | Ability Enhancement Course | 2- 0- 0 | 2 | 50 | 50 | 2 | - | - |
| 21UHUC201 | HU | Society, Environment and Engineering | 2 -0-0 | 2 | 50 | 50 | 2 | - | - |
| Total | | 17 – 2 - 4 | 20 | 450 | 550 | | 100 | | |

^{*} BS- Basic science ES- Engineering Science HU- Humanities, languages and Management AE- Ability enhancement course

^{**} Semester End Examination conducted for 100 marks will be reduced to 50 marks

| | | | Teachi | Teaching | | Examination | | | | |
|-------------|-----------|------------------------------------|------------|----------|-------|--------------|----------|-----------------|----------|--|
| Course Code | *Course | Course Title | L-T-P | | CIE | Theory (SEE) | | Practical (SEE) | | |
| | Category# | | (Hrs/Week) | Credits | Max. | **Max. | Duration | Max. | Duration | |
| | | | | | Marks | Marks | in Hrs. | Marks | In Hrs. | |
| 21UMAC200 | BS | Engineering Mathematics – II | 2-2-0 | 3 | 50 | 100 | 3 | - | - | |
| 21UCYC200 | BS | Engineering Chemistry | 3-0-0 | 3 | 50 | 100 | 3 | - | - | |
| 21UECC200 | ES | Basic Electronics | 3-0-0 | 3 | 50 | 100 | 3 | - | - | |
| 21UCSC200 | ES | Problem Solving & Programming in C | 3-0-0 | 3 | 50 | 100 | 3 | - | - | |
| 21UMGC200 | ES | Engineering Graphics | 2-0-0 | 2 | 50 | 50 | 2 | - | - | |
| 21UHUC200 | HU | Functional English | 1 - 2 - 0 | 2 | 50 | 50 | 2 | - | - | |
| 21UCYL200 | BS | Engineering Chemistry Lab | 0-0-2 | 1 | 50 | - | - | 50 | 2 | |
| 21UCSL200 | ES | Computer Programming Lab | 0-0-2 | 1 | 50 | - | - | 50 | 2 | |
| 21UAEE2XX | AE | Ability Enhancement Course | 2-0-0 | 2 | 50 | 50 | 2 | - | - | |
| Total | | 16 - 4 -4 | 20 | 450 | 550 | | 100 | | | |

^{*} BS- Basic science ES- Engineering Science HU- Humanities, languages and Management AE- Ability enhancement course

Elective Course:

| Course Code | Course Title | Credits |
|-------------|---|---------|
| 21UAEE201 | Numerical Techniques for Engineers | 2 |
| 21UAEE200 | Cyber Law | 2 |

^{**} Semester End Examination conducted for 100 marks will be reduced to 50 marks

III Semester

| | | | Teachir | ng | | Examination | | | | |
|-------------|----------|--|---------------|---------|---------|--------------|----------|-----------------|----------|--|
| Course Code | *Course | Course Title | L-T-P | | CIE | Theory (SEE) | | Practical (SEE) | | |
| | Category | | (Hrs/Week) | Credits | Max. | **Max. | Duration | Max. | Duration | |
| | | | (III s/ Week) | | Marks | Marks | in Hrs. | Marks | in Hrs. | |
| 21UMAC300 | BS | Engineering Mathematics-III | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - | |
| 21UMEC300 | PC | Engineering Thermodynamics | 2 - 2 - 0 | 3 | 50 | 100 | 3 | - | - | |
| 21UMEC301 | PC | Materials Science | 3 - 0 - 0 | 3 | 50 | 100 | 3 | - | - | |
| 21UMEC302 | PC | Mechanics of Materials | 2 - 2 - 0 | 3 | 50 | 100 | 3 | - | - | |
| 21UMEC303 | PC | Machine Drawing | 2 - 0 - 2 | 3 | 50 | 100 | 3 | - | - | |
| 21UAEE374 | AE | CNC Technology (Ability Enhancement course) | 2 - 0 - 0 | 2 | 50 | 50 | 2 | - | - | |
| 21UHUC300 | HU | Universal Human Values - 1 | 2 - 0 - 0 | 2 | 50 | 50 | 2 | - | - | |
| 21UMEL305 | PC | Materials Science & Materials Testing Laboratory | 0 - 0 - 3 | 1.5 | 50 | | - | 50 | 3 | |
| 21UMEL306 | PC | Foundry & Forging Laboratory | 0 - 1 - 2 | 1.5 | 50 | - | - | 50 | 3 | |
| 21UHUA300 | ***HU | Constitution of India & Professional Ethics | 2 - 0 - 0 | Audit | 50 | | - | - | - | |
| 21UMBA301 | ****BS | Mathematics | 3 - 0 - 0 | Audit | 50 | - | - | - | - | |
| | | Total | 21 - 6 - 6 | 22 | 500/550 | 600/650 | | 100 | | |

^{*} BS- Basic science ES- Engineering Science HU- Humanities, languages and Management AE- Ability enhancement course PC- Program core

21UAEE3 - X: "—" is the number assigned to the department. 1- CV, 2-CSE, 3-CH, 4-EE, 5-EC, 6-ISE and 7-ME (Assuming departments offer different Ability Enhancement course for their students).

HOD-ME

^{**} Semester End Examination conducted for 100 marks will be reduced to 50 marks

^{***} Students of all branches will be divided into 2 groups, and each group will take either CIPE or Kannada in 3rd and 4th semester respectively.

^{****} Bridge course on Mathematics for Lateral entry students.