



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthalkuppam, Madagadipet, Puducherry - 605 107

## DEPARTMENT OF MECHANICAL ENGINEERING

### CO ATTAINMENT TABLE( 2013-17 BATCH)

| S. NO | COURSE CODE | COURSE NAME                            | NO. OF STUDENTS APPEARED | NO. OF STUDENTS PASSED | PASS % | CO - ATTAINMENT LEVEL | TARGET LEVEL | ATTAINMENT STATUS |
|-------|-------------|--|--------------------------|------------------------|--------|-----------------------|--------------|-------------------|
| 1     | C101        | Mathematics – I                        | 59                       | 46                     | 77.97  | 3                     | 3            | ATTAINED          |
| 2     | C102        | Physics                                | 60                       | 60                     | 100.00 | 3                     | 3            | ATTAINED          |
| 3     | C103        | Chemistry                              | 60                       | 53                     | 88.33  | 3                     | 3            | ATTAINED          |
| 4     | C104        | Basic Electrical and Electronics       | 60                       | 52                     | 86.67  | 3                     | 3            | ATTAINED          |
| 5     | C105        | Engineering Thermodynamics             | 59                       | 53                     | 89.83  | 3                     | 3            | ATTAINED          |
| 6     | C106        | Computer Programming                   | 60                       | 47                     | 78.33  | 3                     | 3            | ATTAINED          |
| 7     | C107 (P)    | Computer Programming Lab               | 59                       | 59                     | 100.00 | 3                     | 3            | ATTAINED          |
| 8     | C108 (P)    | Engineering Graphics                   | 58                       | 54                     | 93.10  | 3                     | 3            | ATTAINED          |
| 9     | C109 (P)    | Basic Electrical & Electronics Lab     | 59                       | 54                     | 91.53  | 3                     | 3            | ATTAINED          |
| 10    | C110        | Mathematics – II                       | 57                       | 47                     | 82.46  | 3                     | 3            | ATTAINED          |
| 11    | C111        | Material Science                       | 57                       | 53                     | 92.98  | 3                     | 3            | ATTAINED          |
| 12    | C112        | Environmental Science                  | 57                       | 56                     | 98.25  | 3                     | 3            | ATTAINED          |
| 13    | C113        | Basic Civil and Mechanical Engineering | 57                       | 52                     | 91.23  | 3                     | 3            | ATTAINED          |
| 14    | C114        | Engineering Mechanics                  | 57                       | 46                     | 80.70  | 3                     | 3            | ATTAINED          |
| 15    | C115        | Communicative English                  | 57                       | 55                     | 96.49  | 3                     | 3            | ATTAINED          |
| 16    | C116(P)     | Physics lab                            | 57                       | 57                     | 100.00 | 3                     | 3            | ATTAINED          |
| 17    | C117(P)     | Chemistry lab                          | 57                       | 57                     | 100.00 | 3                     | 3            | ATTAINED          |
| 18    | C118 (P)    | Workshop Practice                      | 56                       | 56                     | 100.00 | 3                     | 3            | ATTAINED          |
| 19    | C119 (P)    | NSS / NCC *                            | 57                       | 57                     | 100.00 | 3                     | 3            | ATTAINED          |

|    |         |  |    |    |        |   |   |              |
|----|---------|--|----|----|--------|---|---|--------------|
| 20 | C201    | Mathematics – III                      | 69 | 60 | 86.96  | 3 | 3 | ATTAINED     |
| 21 | C202    | Mechanics of solids                    | 69 | 43 | 62.32  | 2 | 3 | NOT ATTAINED |
| 22 | C203    | Mechanics of Fluids                    | 69 | 47 | 68.12  | 3 | 3 | ATTAINED     |
| 23 | C204    | Applied Thermodynamics                 | 69 | 54 | 78.26  | 3 | 3 | ATTAINED     |
| 24 | C205    | Manufacturing process                  | 69 | 64 | 92.75  | 3 | 3 | ATTAINED     |
| 25 | C206    | Electrical and Electronics Engineering | 69 | 25 | 36.23  | 0 | 3 | NOT ATTAINED |
| 26 | C207(P) | Material Testing and Metallurgy Lab    | 69 | 68 | 98.55  | 3 | 3 | ATTAINED     |
| 27 | C208(P) | Manufacturing process lab-I            | 69 | 68 | 98.55  | 3 | 3 | ATTAINED     |
| 28 | C209(P) | Electrical and Electronics lab         | 69 | 65 | 94.20  | 3 | 3 | ATTAINED     |
| 29 | C210    | Mathematics – IV                       | 69 | 54 | 78.26  | 3 | 3 | ATTAINED     |
| 30 | C211    | Engineering Metallurgy                 | 69 | 57 | 82.61  | 3 | 3 | ATTAINED     |
| 31 | C212    | Fluid Machinery                        | 69 | 57 | 82.61  | 3 | 3 | ATTAINED     |
| 32 | C213    | Kinematics of Machinery                | 69 | 56 | 81.16  | 3 | 3 | ATTAINED     |
| 33 | C214    | Machine Drawing                        | 68 | 63 | 92.65  | 3 | 3 | ATTAINED     |
| 34 | C215    | Machining Processes                    | 68 | 63 | 92.65  | 3 | 3 | ATTAINED     |
| 35 | C216(P) | Fluid Mechanics and Machinery Lab      | 68 | 65 | 95.59  | 3 | 3 | ATTAINED     |
| 36 | C217(P) | Manufacturing Processes Lab - II       | 69 | 69 | 100.00 | 3 | 3 | ATTAINED     |
| 37 | C218(P) | Computer Aided Machine Drawing Lab     | 69 | 66 | 95.65  | 3 | 3 | ATTAINED     |
| 38 | C219(P) | Physical Education                     | 69 | 69 | 100.00 | 3 | 3 | ATTAINED     |
| 39 | C301    | Dynamics of Machinery                  | 68 | 48 | 70.59  | 3 | 3 | ATTAINED     |
| 40 | C302    | Design of                              | 69 | 65 | 94.20  | 3 | 3 | ATTAINED     |



|    |         |                                   |    |    |        |   |   |          |
|----|---------|-----------------------------------|----|----|--------|---|---|----------|
|    |         | Machine Elements                  |    |    |        |   |   |          |
| 41 | C303    | Metrology and Quality Control     | 69 | 63 | 91.30  | 3 | 3 | ATTAINED |
| 42 | C304    | Heat and Mass Transfer            | 69 | 56 | 81.16  | 3 | 3 | ATTAINED |
| 43 | C305    | Mechanical Measurements           | 69 | 67 | 97.10  | 3 | 3 | ATTAINED |
| 44 | C306    | Industrial Casting Technology     | 69 | 66 | 95.65  | 3 | 3 | ATTAINED |
| 45 | C307(P) | Manufacturing Process Lab - III   | 68 | 68 | 100.00 | 3 | 3 | ATTAINED |
| 46 | C308(P) | Mechanical Measurement and        | 68 | 66 | 97.06  | 3 | 3 | ATTAINED |
| 47 | C309(P) | Computational Methods Lab         | 68 | 68 | 100.00 | 3 | 3 | ATTAINED |
| 48 | C310(P) | General Proficiency - I           | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 49 | C311    | Operations Research               | 69 | 58 | 84.06  | 3 | 3 | ATTAINED |
| 50 | C312    | Design of Transmission Systems    | 67 | 61 | 91.04  | 3 | 3 | ATTAINED |
| 51 | C313    | Thermal Engineering               | 69 | 52 | 75.36  | 3 | 3 | ATTAINED |
| 52 | C314    | Computer Integrated Manufacturing | 69 | 66 | 95.65  | 3 | 3 | ATTAINED |
| 53 | C315    | Control System Engineering        | 69 | 67 | 97.10  | 3 | 3 | ATTAINED |
| 54 | C316    | Automobile Engineering            | 69 | 62 | 89.86  | 3 | 3 | ATTAINED |
| 55 | C317(P) | Thermal Engineering Lab - I       | 69 | 66 | 95.65  | 3 | 3 | ATTAINED |
| 56 | C318(P) | Dynamics of Machine Lab           | 69 | 67 | 97.10  | 3 | 3 | ATTAINED |
| 57 | C319(P) | Computational Fluid Dynamics Lab  | 69 | 67 | 97.10  | 3 | 3 | ATTAINED |
| 58 | C320(P) | General Proficiency - II          | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 59 | C401    | Computer Aided Design             | 69 | 64 | 92.75  | 3 | 3 | ATTAINED |

|    |          |   |    |    |        |   |   |          |
|----|----------|---|----|----|--------|---|---|----------|
| 60 | C402     | Industrial Engineering and management                     | 69 | 63 | 91.30  | 3 | 3 | ATTAINED |
| 61 | C403     | Refrigeration, Air Conditioning and Cryogenic engineering | 69 | 66 | 95.65  | 3 | 3 | ATTAINED |
| 62 | C404     | Metal Forming Processes                                   | 69 | 68 | 98.55  | 3 | 3 | ATTAINED |
| 63 | C405 (P) | Thermal Engineering Lab - II                              | 66 | 65 | 98.48  | 3 | 3 | ATTAINED |
| 64 | C406 (P) | Computer Aided Engineering Lab                            | 68 | 68 | 100.00 | 3 | 3 | ATTAINED |
| 65 | C407(P)  | Comprehensive Viva - Voce                                 | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 66 | C408(P)  | Industrial Visit/Training Report                          | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 67 | C409(P)  | Project Work(Phase I)                                     | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 68 | C410     | Power Plant Engineering                                   | 69 | 66 | 95.65  | 3 | 3 | ATTAINED |
| 69 | C411     | Professional Ethics And Indian Constitution               | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 70 | C412     | Composite Materials                                       | 69 | 67 | 97.10  | 3 | 3 | ATTAINED |
| 71 | C413     | Maintenance And Safety Engineering                        | 69 | 68 | 98.55  | 3 | 3 | ATTAINED |
| 72 | C414     | Project Work (Phase- II)                                  | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |
| 73 | C415     | Seminar   | 69 | 69 | 100.00 | 3 | 3 | ATTAINED |



  
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# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthalkuppam, Madagadipet, Puducherry - 605 107

## DEPARTMENT OF MECHANICAL ENGINEERING ATTAINMENT OF PROGRAM OUTCOMES (2013-17 BATCH)

| COURSE CODE | COURSE NAME                            | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| C101        | Mathematics – I                        | 3   | 3   | 3   | 3   | -   | -   | -   | -   | -   | -    | -    | 3    |
| C102        | Physics                                | 3   | 3   | 3   | 3   | -   | 3   | -   | -   | -   | -    | -    | 3    |
| C103        | Chemistry                              | 3   | 3   | 3   | -   | -   | 3   | 3   | -   | -   | -    | -    | 3    |
| C104        | Basic Electrical and Electronics       | 3   | 3   | 3   | -   | -   | 3   | 3   | -   | -   | -    | 3    | 3    |
| C105        | Engineering Thermodynamics             | 3   | 3   | 3   | 3   | 3   | -   | -   | -   | -   | 3    | 3    | 3    |
| C106        | Computer Programming                   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    |
| C107 (P)    | Computer Programming Lab               | 3   | 3   | 3   | 3   | 3   | 3   | -   | -   | 3   | -    | 3    | 3    |
| C108 (P)    | Engineering Graphics                   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    |
| C109 (P)    | Basic Electrical & Electronics Lab     | 3   | 3   | -   | -   | -   | 3   | 3   | -   | 3   | 3    | 3    | 3    |
| C110        | Mathematics – II                       | 3   | 3   | 3   | 3   | -   | -   | 3   | -   | -   | -    | -    | 3    |
| C111        | Material Science                       | 3   | 3   | 3   | -   | -   | 3   | 3   | -   | -   | -    | -    | 3    |
| C112        | Environmental Science                  | 3   | -   | -   | -   | -   | 3   | 3   | -   | -   | -    | 3    | 3    |
| C113        | Basic Civil and Mechanical Engineering | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    |
| C114        | Engineering Mechanics                  | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    |
| C115        | Communicative English                  | -   | -   | -   | -   | -   | -   | -   | -   | 3   | 3    | -    | 3    |
| C116(P)     | Physics lab                            | 3   | -   | -   | 3   | -   | 3   | 3   | -   | 3   | 3    | -    | 3    |

[illegible]



[illegible]

|          |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C315     | Control System Engineering                                | 3 | 3 | 3 | 3 | 3 | 3 | 3 | - | - | - | 3 | 3 |
| C316     | Automobile Engineering                                    | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C317(P)  | Thermal Engineering Lab - I                               | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C318(P)  | Dynamics of Machine Lab                                   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C319(P)  | Computational Fluid Dynamics Lab                          | 3 | 3 | 3 | 3 | 3 | - | - | - | 3 | 3 | 3 | 3 |
| C320(P)  | General Proficiency - II                                  | - | - | - | - | - | - | - | 3 | 3 | 3 | - | 3 |
| C401     | Computer Aided Design                                     | 3 | 3 | 3 | 3 | 3 | - | - | 3 | 3 | 3 | - | 3 |
| C402     | Industrial Engineering and management                     | 3 | 3 | 3 | 3 | 3 | 3 | 3 | - | - | 3 | 3 | 3 |
| C403     | Refrigeration, Air Conditioning and Cryogenic engineering | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C404     | Metal Forming Processes                                   | 3 | 3 | - | 3 | - | 3 | 3 | 3 | - | 3 | 3 | 3 |
| C405 (P) | Thermal Engineering Lab - II                              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C406 (P) | Computer Aided Engineering Lab                            | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C407(P)  | Comprehensive Viva - Voce                                 | 3 | 3 | - | - | 3 | 3 | - | 3 | 3 | 3 | - | 3 |
| C408(P)  | Industrial Visit/Training Report                          | 3 | - | - | 3 | 3 | 3 | - | 3 | 3 | 3 | 3 | 3 |
| C409(P)  | Project Work(Phase I)                                     | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C410     | Power Plant Engineering                                   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C411     | Professional Ethics And Indian Constitution               | 3 | - | - | - | - | 3 | 3 | 3 | 3 | 3 | 3 | 3 |



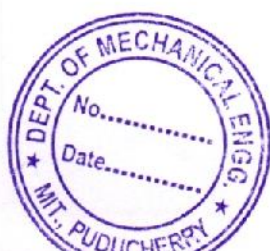
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|------------|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| C412       | Composite Materials                | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| C413       | Maintenance And Safety Engineering | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| C414       | Project Work (Phase- II)           | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| C415       | Seminar                            | 3    | 3    | -    | 3    | 3    | 3    | 3    | -    | 3    | 3    | 3    | 3    |
| AVG OF POs |                                    | 2.94 | 2.94 | 2.93 | 2.93 | 2.93 | 2.93 | 2.98 | 2.93 | 2.91 | 2.94 | 2.93 | 2.94 |

#### DIRECT ASSESSMENT OF POs

| DIRECT ASSESSMENT OF POs      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| PO' S                         | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 |
| AVG OF DIRECT ASSESSMENT      | 2.94 | 2.93 | 2.93 | 2.93 | 2.93 | 2.98 | 2.93 | 2.91 | 2.94 | 2.93 | 2.94 | 2.94 |
| WEIGHTAGE OF 80% OF DIRECT PO | 2.35 | 2.34 | 2.34 | 2.34 | 2.34 | 2.38 | 2.34 | 2.33 | 2.35 | 2.34 | 2.35 | 2.35 |

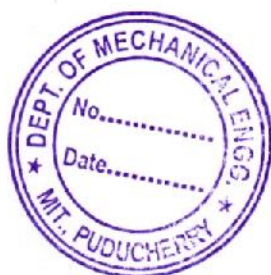
#### INDIRECT ASSESSMENT OF POs

| INDIRECT ASSESSMENT              |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| SURVEYs                          | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 |
| COURSE EXIT SURVEY               | 2.78 | 2.68 | 2.71 | 2.62 | 2.7  | 2.71 | 2.68 | 2.69 | 2.72 | 2.69 | 2.68 | 2.67 |
| ALUMNI SURVEY                    | 2.83 | 2.66 | 2.71 | 2.73 | 2.78 | 2.71 | 2.88 | 2.71 | 2.88 | 2.76 | 2.73 | 2.78 |
| EMPLOYER SURVEY                  | 2.8  | 2.2  | 2.00 | 2.5  | 2.4  | 2.6  | 2.4  | 2.4  | 2.8  | 2.4  | 2.2  | 2.8  |
| AVG OF 3 SURVEYS                 | 2.80 | 2.51 | 2.47 | 2.62 | 2.63 | 2.67 | 2.65 | 2.60 | 2.80 | 2.62 | 2.54 | 2.75 |
| WEIGHTAGE OF 20% OF IN DIRECT PO | 0.56 | 0.50 | 0.49 | 0.52 | 0.53 | 0.53 | 0.53 | 0.52 | 0.56 | 0.52 | 0.51 | 0.55 |



## OVERALL ATTAINMENT OF POs

| OVERALL ATTAINMENT OF POs |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| PO'S                      | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 |
| (DIRECT 80%)              | 2.35 | 2.34 | 2.34 | 2.34 | 2.34 | 2.38 | 2.34 | 2.33 | 2.35 | 2.34 | 2.35 | 2.35 |
| (INDIRECT 20%)            | 0.56 | 0.50 | 0.49 | 0.52 | 0.53 | 0.53 | 0.53 | 0.52 | 0.56 | 0.52 | 0.51 | 0.55 |
| AVERAGE                   | 2.91 | 2.84 | 2.83 | 2.86 | 2.87 | 2.91 | 2.87 | 2.85 | 2.91 | 2.86 | 2.86 | 2.9  |
| TARGET                    | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |



  
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### DEPARTMENT OF MECHANICAL ENGINEERING ATTAINMENT OF PROGRAM SPECIFIC OUTCOMES (2013-17 BATCH)

| COURSE CODE | COURSE NAME                        | PSO1 | PSO2 |
|-------------|------------------------------------|------|------|
| C101        | Mathematics – I                    | -    | 3    |
| C102        | Physics                            | 3    | 3    |
| C103        | Chemistry                          | 3    | -    |
| C104        | Basic Electrical and Electronics   | 3    | 3    |
| C105        | Engineering Thermodynamics         | 3    | 3    |
| C106        | Computer Programming               | 3    | 3    |
| C107 (P)    | Computer Programming Lab           | 3    | 3    |
| C108 (P)    | Engineering Graphics               | 3    | 3    |
| C109 (P)    | Basic Electrical & Electronics Lab | -    | -    |
| C110        | Mathematics – II                   | -    | 3    |
| C111        | Material Science                   | 3    | 3    |
| C112        | Environmental Science              | 3    | 3    |
| C113        | Basic Mechanical Engineering       | 3    | 3    |
| C114        | Engineering Mechanics              | 3    | 3    |
| C115        | Communicative English              | 3    | 3    |
| C116(P)     | Physics lab                        | 3    | 3    |
| C117(P)     | Chemistry lab                      | -    | -    |
| C118 (P)    | Workshop Practice                  | 3    | 3    |
| C119 (P)    | NSS/NCC*                           | -    | -    |

|         |  |   |   |
|---------|--|---|---|
| C201    | Mathematics – III                      | - | 3 |
| C202    | Mechanics of solids                    | 2 | 2 |
| C203    | Mechanics of Fluids                    | 3 | 3 |
| C204    | Applied Thermodynamics                 | 3 | 3 |
| C205    | Manufacturing process                  | 3 | 3 |
| C206    | Electrical and Electronics Engineering | 0 | - |
| C207(P) | Material Testing and Metallurgy Lab    | 3 | 3 |
| C208(P) | Manufacturing process lab-I            | 3 | - |
| C209(P) | Electrical and Electronics lab         | 3 | - |
| C210    | Mathematics – IV                       | - | 3 |
| C211    | Engineering Metallurgy                 | 3 | 3 |
| C212    | Fluid Machinery                        | 3 | 3 |
| C213    | Kinematics of Machinery                | 3 | 3 |
| C214    | Machine Drawing                        | 3 | 3 |
| C215    | Machining Processes                    | 3 | 3 |
| C216(P) | Fluid Mechanics and Machinery Lab      | 3 | 3 |
| C217(P) | Manufacturing Processes Lab - II       | 3 | - |
| C218(P) | Computer Aided Machine Drawing Lab     | 3 | 3 |
| C219(P) | Physical Education                     | - | - |
| C301    | Dynamics of Machinery                  | 3 | 3 |
| C302    | Design of Machine Elements             | 3 | 3 |
| C303    | Metrology and Quality Control          | 3 | 3 |



|         |   |   |   |
|---------|---|---|---|
| C304    | Heat and Mass Transfer                                    | 3 | 3 |
| C305    | Mechanical Measurements                                   | 3 | 3 |
| C306    | Industrial Casting Technology                             | 3 | 3 |
| C307(P) | Manufacturing Process Lab - III                           | 3 | 3 |
| C308(P) | Mechanical Measurement and                                | 3 | 3 |
| C309(P) | Computational Methods Lab                                 | - | 3 |
| C310(P) | General Proficiency - I                                   | - | - |
| C311    | Operations Research                                       | 3 | 3 |
| C312    | Design of Transmission Systems                            | 3 | 3 |
| C313    | Thermal Engineering                                       | 3 | 3 |
| C314    | Computer Integrated Manufacturing                         | 3 | 3 |
| C315    | Control System Engineering                                | 3 | 3 |
| C316    | Automobile Engineering                                    | 3 | 3 |
| C317(P) | Thermal Engineering Lab - I                               | 3 | 3 |
| C318(P) | Dynamics of Machine Lab                                   | 3 | 3 |
| C319(P) | Computational Fluid Dynamics Lab                          | - | 3 |
| C320(P) | General Proficiency - II                                  | - | - |
| C401    | Computer Aided Design                                     | - | 3 |
| C402    | Industrial Engineering and management                     | 3 | 3 |
| C403    | Refrigeration, Air Conditioning and Cryogenic engineering | 3 | 3 |

|                         |   |             |             |
|-------------------------|---|-------------|-------------|
| C404                    | Metal Forming Processes                     | 3           | 3           |
| C405 (P)                | Thermal Engineering Lab - II                | 3           | 3           |
| C406 (P)                | Computer Aided Engineering Lab              | -           | 3           |
| C407(P)                 | Comprehensive Viva - Voce                   | 3           | 3           |
| C408(P)                 | Industrial Visit/Training Report            | 3           | 3           |
| C409(P)                 | Project Work(Phase I)                       | 3           | 3           |
| C410                    | Power Plant Engineering                     | 3           | 3           |
| C411                    | Professional Ethics And Indian Constitution | 3           | -           |
| C412                    | Composite Materials                         | 3           | 3           |
| C413                    | Maintenance And Safety Engineering          | 3           | 3           |
| C414(P)                 | Project Work (Phase- II)                    | 3           | 3           |
| C415(P)                 | Seminar                                     | 3           | -           |
| <b>Average of PSO's</b> |   | <b>2.93</b> | <b>2.98</b> |

#### **DIRECT ASSESSMENT OF PSOs**

| <b>DIRECT ASSESSMENT OF PSO</b> |             |             |
|---------------------------------|-------------|-------------|
| <b>PSO'S</b>                    | <b>PSO1</b> | <b>PSO2</b> |
| <b>AVG OF DIRECT ASSESSMENT</b> | <b>2.93</b> | <b>2.98</b> |
| <b>(WEIGHTAGE OF 80%)</b>       | <b>2.34</b> | <b>2.39</b> |



#### INDIRECT ASSESSMENT OF PSOs

| INDIRECT ASSESSMENT OF PSO |      |      |
|----------------------------|------|------|
| SURVEYS                    | PSO1 | PSO2 |
| COURSE EXIT SURVEY         | 2.63 | 2.71 |
| ALUMNI SURVEY              | 2.76 | 2.73 |
| EMPLOYER SURVEY            | 2.60 | 2.20 |
| AVG OF SURVEYS             | 2.66 | 2.55 |
| (WEIGHTAGE OF 20%)         | 0.53 | 0.51 |

#### OVERALL ATTAINMENT OF PSOs

| OVERALL ATTAINMENT OF PSO |      |      |
|---------------------------|------|------|
| PSO'S                     | PSO1 | PSO2 |
| (DIRECT 80%)              | 2.34 | 2.39 |
| (INDIRECT 20%)            | 0.53 | 0.51 |
| OVERALL                   | 2.87 | 2.90 |
| TARGET                    | 2.50 | 2.50 |



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