



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthalkuppam, Madagadipet, Puducherry - 605 107

## DEPARTMENT OF MECHANICAL ENGINEERING

### CO ATTAINMENT TABLE ( 2014-18 BATCH)

| SL<br>·<br>N<br>O | COURS<br>E<br>CODE | COURSE<br>NAME                         | NO. OF<br>STUDEN<br>TS<br>APPEAR<br>ED | NO. OF<br>STUDEN<br>TS<br>PASSED | PAS<br>S % | CO –<br>ATTAI<br>N<br>MENT<br>LEVE<br>L | TARGE<br>T<br>LEVEL | ATTAINME<br>NT STATUS |
|-------------------|--------------------|----------------------------------------|----------------------------------------|----------------------------------|------------|-----------------------------------------|---------------------|-----------------------|
| 1                 | C101               | Mathematics – I                        | 58                                     | 38                               | 65.52      | 2                                       | 3                   | Target not Attained   |
| 2                 | C102               | Physics                                | 58                                     | 51                               | 87.9       | 3                                       | 3                   | Target Attained       |
| 3                 | C103               | Chemistry                              | 58                                     | 39                               | 67.24      | 2                                       | 3                   | Target not Attained   |
| 4                 | C104               | Basic Electrical and Electronics       | 58                                     | 23                               | 39.66      | 0                                       | 3                   | Target not Attained   |
| 5                 | C105               | Engineering Thermodynamics             | 58                                     | 48                               | 82.76      | 3                                       | 3                   | Target Attained       |
| 6                 | C106               | Computer Programming                   | 58                                     | 43                               | 74         | 3                                       | 3                   | Target Attained       |
| 7                 | C107 (P)           | Computer Programming Lab               | 52                                     | 52                               | 100        | 3                                       | 3                   | Target Attained       |
| 8                 | C108 (P)           | Engineering Graphics                   | 56                                     | 51                               | 91.07      | 3                                       | 3                   | Target Attained       |
| 9                 | C109 (P)           | Basic Electrical & Electronics Lab     | 52                                     | 49                               | 94.23      | 3                                       | 3                   | Target Attained       |
| 10                | C110               | Mathematics – II                       | 59                                     | 51                               | 86.44      | 3                                       | 3                   | Target Attained       |
| 11                | C111               | Material Science                       | 59                                     | 51                               | 86.44      | 3                                       | 3                   | Target Attained       |
| 12                | C112               | Environmental Science                  | 59                                     | 53                               | 89.83      | 3                                       | 3                   | Target Attained       |
| 13                | C113               | Basic Civil and Mechanical Engineering | 58                                     | 45                               | 77.59      | 3                                       | 3                   | Target Attained       |
| 14                | C114               | Engineering Mechanics                  | 57                                     | 41                               | 71.92      | 3                                       | 3                   | Target Attained       |
| 15                | C115               | Communicative English                  | 59                                     | 56                               | 94.92      | 3                                       | 3                   | Target Attained       |
| 16                | C116(P)            | Physics lab                            | 58                                     | 58                               | 100        | 3                                       | 3                   | Target Attained       |



|    |          |                                        |    |    |       |   |   |                     |
|----|----------|----------------------------------------|----|----|-------|---|---|---------------------|
| 17 | C117(P)  | Chemistry lab                          | 58 | 58 | 100   | 3 | 3 | Target Attained     |
| 18 | C118 (P) | Workshop Practice                      | 59 | 59 | 100   | 3 | 3 | Target Attained     |
| 19 | C119 (P) | NSS / NCC *                            | 59 | 59 | 100   | 3 | 3 | Target Attained     |
| 20 | C201     | Mathematics – III                      | 65 | 33 | 50.76 | 0 | 3 | Target not Attained |
| 21 | C202     | Mechanics of solids                    | 65 | 51 | 78.46 | 3 | 3 | Target Attained     |
| 22 | C203     | Mechanics of Fluids                    | 65 | 43 | 66.15 | 2 | 3 | Target not Attained |
| 23 | C204     | Applied Thermodynamics                 | 64 | 46 | 72    | 3 | 3 | Target Attained     |
| 24 | C205     | Manufacturing process                  | 65 | 36 | 55.38 | 0 | 3 | Target not Attained |
| 25 | C206     | Electrical and Electronics Engineering | 65 | 23 | 35    | 0 | 3 | Target not Attained |
| 26 | C207(P)  | Material Testing and Metallurgy Lab    | 65 | 59 | 90.77 | 3 | 3 | Target Attained     |
| 27 | C208(P)  | Manufacturing process lab-1            | 64 | 59 | 90.76 | 3 | 3 | Target Attained     |
| 28 | C209(P)  | Electrical and Electronics lab         | 63 | 57 | 87.69 | 3 | 3 | Target Attained     |
| 29 | C210     | Mathematics – IV                       | 63 | 54 | 85.71 | 3 | 3 | Target Attained     |
| 30 | C211     | Engineering Metallurgy                 | 63 | 52 | 82.5  | 3 | 3 | Target Attained     |
| 31 | C212     | Fluid Machinery                        | 63 | 48 | 76.2  | 3 | 3 | Target Attained     |
| 32 | C213     | Kinematics of Machinery                | 63 | 43 | 67    | 2 | 3 | Target not Attained |
| 33 | C214     | Machine Drawing                        | 63 | 61 | 96.8  | 3 | 3 | Target Attained     |
| 34 | C215     | Machining Processes                    | 63 | 55 | 87.3  | 3 | 3 | Target Attained     |
| 35 | C216(P)  | Fluid Mechanics and Machinery Lab      | 63 | 62 | 98.4  | 3 | 3 | Target Attained     |
| 36 | C217(P)  | Manufacturing Processes Lab            | 63 | 63 | 100   | 3 | 3 | Target Attained     |



|    |         |                                    |    |    |       |   |   |                     |
|----|---------|------------------------------------|----|----|-------|---|---|---------------------|
|    |         | - II                               |    |    |       |   |   |                     |
| 37 | C218(P) | Computer Aided Machine Drawing Lab | 63 | 62 | 98.4  | 3 | 3 | Target Attained     |
| 38 | C219(P) | Physical Education                 | 63 | 63 | 100   | 3 | 3 | Target Attained     |
| 39 | C301    | Dynamics of Machinery              | 63 | 46 | 73    | 3 | 3 | Target Attained     |
| 40 | C302    | Design of Machine Elements         | 63 | 49 | 77.58 | 3 | 3 | Target Attained     |
| 41 | C303    | Metrology and Quality Control      | 63 | 48 | 76.13 | 3 | 3 | Target Attained     |
| 42 | C304    | Heat and Mass Transfer             | 63 | 44 | 69.8  | 2 | 3 | Target not Attained |
| 43 | C305    | Mechanical Measurements            | 63 | 57 | 90.5  | 3 | 3 | Target Attained     |
| 44 | C306    | Industrial Casting Technology      | 63 | 57 | 90.5  | 3 | 3 | Target Attained     |
| 45 | C307(P) | Manufacturing Process Lab - III    | 64 | 63 | 98.44 | 3 | 3 | Target Attained     |
| 46 | C308(P) | Mechanical Measurement and         | 62 | 59 | 95.2  | 3 | 3 | Target Attained     |
| 47 | C309(P) | Computational Methods Lab          | 64 | 63 | 98.43 | 3 | 3 | Target Attained     |
| 48 | C310(P) | General Proficiency - I            | 64 | 64 | 100   | 3 | 3 | Target Attained     |
| 49 | C311    | Operations Research                | 63 | 55 | 87.30 | 3 | 3 | Target Attained     |
| 50 | C312    | Design of Transmission Systems     | 63 | 52 | 83.87 | 3 | 3 | Target Attained     |
| 51 | C313    | Thermal Engineering                | 63 | 57 | 90.47 | 3 | 3 | Target Attained     |
| 52 | C314    | Computer Integrated Manufacturing  | 63 | 60 | 95.24 | 3 | 3 | Target Attained     |
| 53 | C315    | Control System Engineering         | 63 | 57 | 90.48 | 3 | 3 | Target Attained     |
| 54 | C316    | Automobile Engineering             | 63 | 63 | 100   | 3 | 3 | Target Attained     |
| 55 | C317(P) | Thermal Engineering                | 62 | 62 | 100   | 3 | 3 | Target Attained     |



|    |          |                                                           |    |    |       |   |   |                 |
|----|----------|-----------------------------------------------------------|----|----|-------|---|---|-----------------|
|    |          | Lab - I                                                   |    |    |       |   |   |                 |
| 56 | C318(P)  | Dynamics of Machine Lab                                   | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 57 | C319(P)  | Computational Fluid Dynamics Lab                          | 60 | 60 | 100   | 3 | 3 | Target Attained |
| 58 | C320(P)  | General Proficiency - II                                  | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 59 | C401     | Computer Aided Design                                     | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 60 | C402     | Industrial Engineering and management                     | 63 | 59 | 93.65 | 3 | 3 | Target Attained |
| 61 | C403     | Refrigeration, Air Conditioning and Cryogenic engineering | 63 | 59 | 93.65 | 3 | 3 | Target Attained |
| 62 | C404     | Metal Forming Processes                                   | 63 | 62 | 98.41 | 3 | 3 | Target Attained |
| 63 | C405 (P) | Thermal Engineering Lab - II                              | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 64 | C406 (P) | Computer Aided Engineering Lab                            | 63 | 60 | 95.24 | 3 | 3 | Target Attained |
| 65 | C407(P)  | Comprehensive Viva - Voce                                 | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 66 | C408(P)  | Industrial Visit/Training Report                          | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 67 | C409(P)  | Project Work(Phase I)                                     | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 68 | C410     | Power Plant Engineering                                   | 63 | 61 | 96.83 | 3 | 3 | Target Attained |
| 69 | C411     | Professional Ethics And Indian Constitution               | 63 | 63 | 100   | 3 | 3 | Target Attained |
| 70 | C412     | Composite Materials                                       | 62 | 60 | 96.77 | 3 | 3 | Target Attained |
| 71 | C413     | Maintenance And Safety                                    | 63 | 63 | 100   | 3 | 3 | Target Attained |

|    |      |                             |    |    |     |   |   |                    |
|----|------|-----------------------------|----|----|-----|---|---|--------------------|
|    |      | Engineering                 |    |    |     |   |   |                    |
| 72 | C414 | Project Work<br>(Phase- II) | 63 | 63 | 100 | 3 | 3 | Target<br>Attained |
| 73 | C415 | Seminar                     | 63 | 63 | 100 | 3 | 3 | Target<br>Attained |



  
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# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthalkuppam, Madagadipet, Puducherry - 605 107

DEPARTMENT OF MECHANICAL ENGINEERING

ATTAINMENT OF PROGRAM OUTCOMES (2014-18 BATCH)

| CO       | Coure 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   | 1   | 1   |     | 1   |     |     |     |      |      | 3    |
| C103     | Chemistry                              | 3   | 3   | 3   |     |     | 2   | 1   |     |     |      |      | 2    |
| C104     | Basic Electrical and Electronics       | 3   | 2   | 2   |     |     | 1   | 1   |     |     |      | 1    | 3    |
| C105     | Engineering Thermodynamics             | 3   | 3   | 2   | 3   | 2   |     |     |     |     | 1    | 1    | 3    |
| C106     | Computer Programming                   | 2   | 2   | 2   | 2   | 2   | 2   | 1   | 1   | 1   | 2    | 1    | 1    |
| C107 (P) | Computer Programming Lab               | 1   | 2   | 1   | 1   | 1   | 1   |     |     | 1   |      | 1    | 1    |
| C108 (P) | Engineering Graphics                   | 3   | 3   | 3   | 2   | 2   | 2   | 3   | 3   | 1   | 3    | 2    | 2    |
| C109 (P) | Basic Electrical & Electronics Lab     | 3   | 3   |     |     |     | 2   | 2   |     | 1   | 1    | 1    | 2    |
| C110     | Mathematics – II                       | 3   | 3   | 3   | 3   |     |     | 1   |     |     |      |      | 3    |
| C111     | Material Science                       | 3   | 3   | 3   |     |     | 2   | 2   |     |     |      |      | 3    |
| C112     | Environmental Science                  | 2   |     |     |     |     | 3   | 3   |     |     |      | 2    | 3    |
| C113     | Basic Civil and Mechanical Engineering | 3   | 2   | 2   | 2   | 1   | 3   | 3   | 2   | 3   | 3    | 2    | 2    |
| C114     | Engineering Mechanics                  | 3   | 3   | 2   | 2   | 1   | 3   | 2   | 2   | 1   | 1    | 1    | 2    |
| C115     | Communicative English                  |     |     |     |     |     |     |     |     | 2   | 3    |      | 3    |
| C116(P)  | Physics lab                            | 3   |     |     | 1   |     | 1   | 1   |     | 1   | 2    |      | 2    |
| C117(P)  | Chemistry lab                          | 3   |     |     |     |     | 1   | 1   |     | 2   | 1    |      | 2    |
| C118 (P) | Workshop Practice                      | 2   | 2   |     | 3   | 1   | 3   | 3   | 3   | 3   | 3    | 3    | 3    |
| C119 (P) | NSS / NCC *                            | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 3   | 2   | 2    | 2    | 1    |
| C201     | Mathematics – III                      | 3   | 3   | 3   | 3   | -   | -   | 1   | -   | -   | -    | -    | 3    |
| C202     | Mechanics of solids                    | 3   | 3   | 3   | 2   |     | 3   | 2   | 1   |     | 2    |      | 3    |
| C203     | Mechanics of Fluids                    | 3   | 3   | 3   | 3   | 1   | 1   | 1   |     |     | 2    | 1    | 3    |
| C204     | Applied Thermodynamics                 | 3   | 3   | 3   | 1   | 1   | 2   |     |     |     | 2    | 1    | 3    |

|         |                                          |   |   |   |   |   |   |   |   |   |   |   |   |
|---------|------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| C205    | Manufacturing process                    | 3 |   | 1 |   |   | 2 | 2 | 1 | 2 | 2 |   | 2 |
| C206    | Electrical and Electronics Engineering   | 2 | 2 | 2 | 2 | 2 |   | 1 | 1 | 2 | 1 | 2 | 1 |
| C207(P) | Material Testing and Metallurgy Lab      | 3 | 2 | 3 | 2 |   | 2 |   |   | 3 | 3 | 3 | 3 |
| C208(P) | Manufacturing process lab-I              |   |   |   | 1 |   | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| C209(P) | Electrical and Electronics lab           | 2 | 2 | 2 | 2 | 2 |   | 1 | 1 | 2 | 1 | 2 | 1 |
| C210    | Mathematics – IV                         | 3 | 3 | 3 | 3 |   |   | 1 |   |   |   | 1 | 3 |
| C211    | Engineering Metallurgy                   | 2 | 3 | 2 | 3 |   | 3 |   |   |   |   |   |   |
| C212    | Fluid Machinery                          | 3 | 3 | 2 | 3 | 1 | 2 | 2 |   |   | 1 | 3 | 3 |
| C213    | Kinematics of Machinery                  | 3 | 3 | 3 | 1 |   | 2 | 2 | 1 |   | 2 |   | 3 |
| C214    | Machine Drawing                          | 3 | 2 | 3 | 1 | 3 | 3 | 2 | 2 | 3 | 2 |   | 3 |
| C215    | Machining Processes                      | 3 | 1 |   |   |   | 2 | 2 | 1 |   | 2 | 1 | 2 |
| C216(P) | Fluid Mechanics and Machinery Lab        | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 3 | 2 | 3 |
| C217(P) | Manufacturing Processes Lab - II         |   |   |   | 1 |   | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| C218(P) | Computer Aided Machine Drawing Lab       | 1 | 2 | 3 | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 2 |
| C219(P) | Physical Education                       |   |   |   |   |   | 1 |   | 3 | 3 | 2 |   | 1 |
| C301    | Dynamics of Machinery                    | 3 | 3 | 3 | 1 |   | 2 | 2 | 1 |   | 2 |   | 3 |
| C302    | Design of Machine Elements               | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 3 | 3 |   | 3 |
| C303    | Metrology and Quality Control            | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 1 |   | 1 | 2 | 3 |
| C304    | Heat and Mass Transfer                   | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 3 |
| C305    | Mechanical Measurements                  | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| C306    | Industrial Casting Technology            | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 1 | 2 |
| C307(P) | Manufacturing Process Lab - III          |   |   |   | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| C308(P) | Mechanical Measurement and Metrology lab | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |



|          |                                                           |   |   |   |   |   |   |   |   |   |   |   |   |
|----------|-----------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| C309(P)  | Computational Methods Lab                                 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 3 | 3 | 3 | 3 | 3 |
| C310(P)  | General Proficiency - I                                   |   |   |   |   |   |   |   |   | 1 | 1 |   | 1 |
| C311     | Operations Research                                       | 3 | 3 | 3 | 3 |   | 2 | 2 |   |   | 2 | 2 | 3 |
| C312     | Design of Transmission Systems                            | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 3 | 1 | 3 |
| C313     | Thermal Engineering                                       | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 1 | 2 | 3 | 3 |
| C314     | Computer Integrated Manufacturing                         | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| C315     | Control System Engineering                                | 3 | 3 | 3 | 2 | 2 | 1 | 1 |   |   |   | 2 | 2 |
| C316     | Automobile Engineering                                    | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |
| C317(P)  | Thermal Engineering Lab - I                               | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| C318(P)  | Dynamics of Machine Lab                                   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |
| C319(P)  | Computational Fluid Dynamics Lab                          | 3 | 3 | 3 | 1 | 3 |   |   |   | 2 | 3 | 1 | 3 |
| C320(P)  | General Proficiency - II                                  |   |   |   |   |   |   |   | 1 | 1 | 1 |   | 1 |
| C401     | Computer Aided Design                                     | 3 | 3 | 3 | 3 | 3 |   |   | 1 | 2 | 3 |   | 3 |
| C402     | Industrial Engineering and management                     | 3 | 2 | 3 | 3 | 3 | 2 | 2 |   |   | 2 | 3 | 3 |
| C403     | Refrigeration, Air Conditioning and Cryogenic engineering | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| C404     | Metal Forming Processes                                   | 1 | 3 |   | 3 |   | 3 | 3 | 1 |   | 3 | 2 | 3 |
| C405 (P) | Thermal Engineering Lab - II                              | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| C406 (P) | Computer Aided Engineering Lab                            | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |
| C407(P)  | Comprehensive Viva - Voce                                 | 3 | 2 |   |   | 1 | 2 |   | 2 | 1 | 3 |   | 3 |
| C408(P)  | Industrial Visit/Training Report                          | 3 |   |   | 1 | 2 | 2 |   | 1 | 2 | 3 | 2 | 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 | 2 | 2 | 2 | 2 | 2 |



|         |                                             |      |      |      |      |      |      |      |      |      |      |      |      |
|---------|---------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| C411    | Professional Ethics And Indian Constitution | 3    |      |      |      |      | 1    | 1    | 3    | 3    | 3    | 3    | 3    |
| C412    | Composite Materials                         | 1    | 2    | 1    | 2    | 1    | 2    | 3    | 1    | 1    | 2    | 1    | 3    |
| C413    | Maintenance And Safety Engineering          | 1    | 1    | 2    | 1    | 1    | 2    | 3    | 3    | 3    | 2    | 1    | 3    |
| C414(P) | Project Work (Phase- II)                    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| C415(P) | Seminar                                     | 3    | 2    |      | 2    | 3    | 2    | 2    |      | 1    | 3    | 1    | 1    |
| AVG     |                                             | 2.76 | 2.78 | 2.71 | 2.85 | 2.91 | 2.82 | 2.73 | 2.81 | 2.88 | 2.85 | 2.81 | 2.78 |

#### 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      | 2.76 | 2.78 | 2.71 | 2.85 | 2.91 | 2.82 | 2.73 | 2.81 | 2.88 | 2.85 | 2.81 | 2.78 |
| WEIGHTAGE OF 80% OF DIRECT PO | 2.21 | 2.23 | 2.17 | 2.28 | 2.33 | 2.26 | 2.18 | 2.25 | 2.30 | 2.28 | 2.25 | 2.22 |

#### INDIRECT ASSESSMENT OF POs

| INDIRECT ASSESSMENT              |       |       |      |       |       |       |       |      |       |       |       |       |
|----------------------------------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|
| SURVEYs                          | PO1   | PO2   | PO3  | PO4   | PO5   | PO6   | PO7   | PO8  | PO9   | PO10  | PO11  | PO12  |
| COURSE EXIT SURVEY               | 2.55  | 2.44  | 2.59 | 2.50  | 2.55  | 2.36  | 2.47  | 2.33 | 2.42  | 2.35  | 2.38  | 2.41  |
| ALUMNI SURVEY                    | 2.88  | 2.58  | 2.81 | 2.54  | 2.58  | 2.62  | 2.58  | 2.77 | 2.81  | 2.77  | 2.69  | 2.62  |
| 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                 | 2.72  | 2.51  | 2.7  | 2.52  | 2.57  | 2.49  | 2.52  | 2.55 | 2.62  | 2.56  | 2.54  | 2.51  |
| WEIGHTAGE OF 20% OF IN DIRECT PO | 0.543 | 0.502 | 0.54 | 0.504 | 0.513 | 0.498 | 0.505 | 0.51 | 0.523 | 0.512 | 0.507 | 0.503 |



# OVERALL ATTAINMENT OF POs

| OVERALL ATTAINMENT OF POs |       |       |      |       |       |       |       |      |       |       |       |       |
|---------------------------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|
| PO' S                     | PO1   | PO2   | PO3  | PO4   | PO5   | PO6   | PO7   | PO8  | PO9   | PO10  | PO11  | PO12  |
| (DIRECT<br>80%)           | 2.21  | 2.23  | 2.17 | 2.28  | 2.33  | 2.26  | 2.18  | 2.25 | 2.30  | 2.28  | 2.25  | 2.22  |
| (INDIRECT<br>20%)         | 0.543 | 0.502 | 0.54 | 0.504 | 0.513 | 0.498 | 0.505 | 0.51 | 0.523 | 0.512 | 0.507 | 0.503 |
| ADD                       | 2.75  | 2.73  | 2.71 | 2.78  | 2.84  | 2.76  | 2.69  | 2.76 | 2.82  | 2.79  | 2.76  | 2.72  |
| TARGET                    | 2.75  | 2.75  | 2.75 | 2.75  | 2.75  | 2.75  | 2.75  | 2.75 | 2.75  | 2.75  | 2.75  | 2.75  |



  
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## DEPARTMENT OF MECHANICAL ENGINEERING

### ATTAINMENT OF PROGRAM SPECIFIC OUTCOMES (2014-18 BATCH)

| COURSE CODE | COURSE NAME                        | PSO1 | PSO2 |
|-------------|------------------------------------|------|------|
| C101        | Mathematics – I                    |      | 2    |
| C102        | Physics                            | 3    | 3    |
| C103        | Chemistry                          | 1    |      |
| 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                | 3    | 3    |



|         |                                        |   |   |
|---------|----------------------------------------|---|---|
| C203    | Mechanics of Fluids                    | 3 | 3 |
| C204    | Applied Thermodynamics                 | 3 | 3 |
| C205    | Manufacturing process                  | 3 | 3 |
| C206    | Electrical and Electronics Engineering | 3 |   |
| 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                                       | 1 | 2 |
| C312     | Design of Transmission Systems                            | 3 | 3 |
| C313     | Thermal Engineering                                       | 3 | 3 |
| C314     | Computer Integrated Manufacturing                         | 3 | 3 |
| C315     | Control System Engineering                                | 3 | 2 |
| C316     | Automobile Engineering                                    | 3 | 1 |
| C317(P)  | Thermal Engineering Lab - I                               | 3 | 1 |
| 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                     | 2 | 3 |
| C403     | Refrigeration, Air Conditioning and Cryogenic engineering | 3 | 2 |
| C404     | Metal Forming Processes                                   | 3 | 1 |
| C405 (P) | Thermal Engineering Lab - II                              | 3 | 2 |
| C406 (P) | Computer Aided Engineering Lab                            |   | 3 |
| C407(P)  | Comprehensive Viva - Voce                                 | 2 | 2 |



|                  |                                             |      |      |
|------------------|---------------------------------------------|------|------|
| C408(P)          | Industrial Visit/Training Report            | 1    | 2    |
| C409(P)          | Project Work(Phase I)                       | 2    | 3    |
| C410             | Power Plant Engineering                     | 3    | 3    |
| C411             | Professional Ethics And Indian Constitution | 3    |      |
| C412             | Composite Materials                         | 3    | 2    |
| C413             | Maintenance And Safety Engineering          | 3    | 1    |
| C414(P)          | Project Work (Phase- II)                    | 3    | 3    |
| C415(P)          | Seminar                                     | 1    |      |
| Average of PSO's |                                             | 2.81 | 2.73 |

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

| <b>DIRECT ASSESSMENT OF PSO</b> |      |      |
|---------------------------------|------|------|
| PSO'S                           | PSO1 | PSO2 |
| AVG OF DIRECT ASSESSMENT        | 2.81 | 2.73 |
| (WEIGHTAGE OF 80%)              | 2.25 | 2.19 |

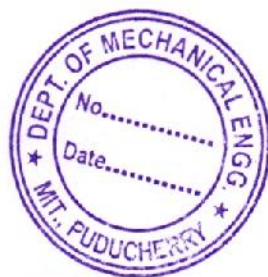
#### **INDIRECT ASSESSMENT OF PSOs**

| <b>INDIRECT ASSESSMENT OF PSO</b> |      |      |
|-----------------------------------|------|------|
| SURVEYs                           | PSO1 | PSO2 |
| COURSE EXIT SURVEY                | 2.58 | 2.64 |
| ALUMNI SURVEY                     | 3.00 | 2.42 |
| EMPLOYER SURVEY                   | 2.60 | 2.20 |
| AVG OF SURVEYS                    | 2.79 | 2.53 |
| (WEIGHTAGE OF 20%)                | 0.56 | 0.51 |



# OVERALL ATTAINMENT OF PSOs

| OVERALL ATTAINMENT OF PSO |      |      |
|---------------------------|------|------|
| PSO'S                     | PSO1 | PSO2 |
| (DIRECT 80%)              | 2.25 | 2.19 |
| (INDIRECT 20%)            | 0.56 | 0.51 |
| OVERALL                   | 2.81 | 2.7  |
| TARGET                    | 2.75 | 2.75 |



  
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