

# UJJAIN ENGINEERING COLLEGE, UJJAIN. (MP)

Course of Study and Scheme of Examination **M.Tech. Chemical Engg.**  
(with Specilization in Environmental Management)

**Second Sem.**  
**FROM JULY' 2012**

| SEM           | Sr.No. | SUBJECTS           |  | Periods Per Week |   |          |           | DISTRIBUTION OF MARKS |            |           |                 |            | TOTAL<br>(1 to 5) |
|---------------|--------|--------------------|--|------------------|---|----------|-----------|-----------------------|------------|-----------|-----------------|------------|-------------------|
|               |        |                    |  |                  |   |          |           | Theory Block          |            |           | Practical Block |            |                   |
|               |        | Code No.           | TITLE  | L                | T   | P        | C         | EST                   | MST        | QAR       | EST             | LQAR       |                   |
|               |        |                    |  | 1                | 2   | 3        | 4         | 5                     |            |           |                 |            |                   |
| <b>SECOND</b> | 1      | CM-12001           | Adv. Chemical Reaction Engg.                         | 3                | 0   | 0        | 3         | 70                    | 20         | 10        |                 |            | 100               |
|               | 2      | CM-12002           | Adv. Trasport Phenomena                              | 3                | 0   | 0        | 3         | 70                    | 20         | 10        |                 |            | 100               |
|               | 3      | CM-12003           | Adv. Water and waste Water Management                | 3                | 0   | 0        | 3         | 70                    | 20         | 10        |                 |            | 100               |
|               | 4      | CM-1203X           | Elective-III   | 3                | 0   | 0        | 3         | 70                    | 20         | 10        |                 |            | 100               |
|               | 5      | CM-1204X           | Elective-IV  | 3                | 0   | 0        | 3         | 70                    | 20         | 10        |                 |            | 100               |
|               | 6      | CM-12006           | <b>Lab-3</b> (Chemical Reaction Engg. )              | 0                | 0   | 3        | 3         |                       |            |           | 60              | 40         | 100               |
|               | 7      | CM-12007           | <b>Lab-4</b> (Adv. Water and waste Water Management) | 0                | 0   | 3        | 3         |                       |            |           | 60              | 40         | 100               |
|               | 8      | CM-12008           | Seminar (Presentation before faculty)                | 0                | 0   | 1        | 1         |                       |            |           |                 | 50         | 50                |
|               | 9      | Comprehansive Viva |  |                  | Student has to get atleast pass grade to appear in the Main Examination |          |           |                       |            |           |                 |            |                   |
| <b>TOTAL</b>  |        |                    |  | <b>15</b>        | <b>0</b>  | <b>7</b> | <b>22</b> | <b>350</b>            | <b>100</b> | <b>50</b> | <b>120</b>      | <b>130</b> | <b>750</b>        |

|                           |                              |     |                                 |         |
|---------------------------|------------------------------|-----|---------------------------------|---------|
| <i>Minimum Pass Marks</i> | (A) ESE                      | 40% | <i>Duration of Theory Paper</i> | 3 Hours |
|                           | (B) Theory / Practical Block | 40% |                                 |         |

|                     |          |  |
|---------------------|----------|--|
| <b>Elective-III</b> | CM-12031 | <b>Environmental Impact Assessment</b>     |
|                     | CM-12032 | Instrumentation for Environmental Analysis |
|                     | CM-12033 | Data Acquisition Monitoring                |

|                    |          |   |
|--------------------|----------|---|
| <b>Elective-IV</b> | CM-12041 | Advance Separation Processes                  |
|                    | CM-12042 | <b>Optimization Techniques</b>                |
|                    | CM-12043 | Computational Methods in Chemical Engineering |

**ESE** - End Semester Examination  
**MST** - Mid Semester Test (Two test of 10 marks each)  
**QAR** - Quizzes, Assignments & Regularity  
**LQAR** - Lab, Quizzes, Assignments & Regularity