



CHEMICAL ENGINEERING MSc Program

| REMEDIAL COURSES | | | | |
|---------------------------------|-------------|---|------------|-------------|
| Dept. | Code | Course Name | CR. | ECTS |
| CHBE | 215 | Material and Energy Balances | NC | |
| CHBE | 232 | CHBE I : Fluid Mechanics | NC | |
| CHBE | 331 | CHBE II : Heat Transfer | NC | |
| CHBE | 333 | CHBE III : Mass Transfer | NC | |
| CHBE | 362 | Reactor Design | NC | |
| MATH | 241 | Differential Equations | NC | |
| PROGRAM COURSES | | | | |
| Dept. | Code | Course Name | CR. | ECTS |
| CHBE | 512 | Modeling and Analysis of Chemical Engineering Systems | 3 | 10 |
| CHBE | 514 | Advanced Engineering Thermodynamics | 3 | 10 |
| CHBE | 534 | Transport Phenomena | 3 | 10 |
| | | Departmental Elective I | 3 | 10 |
| | | Departmental Elective II | 3 | 10 |
| | | Area Elective I | 3 | 10 |
| | | Free Elective I | 3 | 7 |
| CHBE | 590 | Research Seminar | NC | 2 |
| CHBE | 600 | MSc Thesis | NC | 60 |
| | | TOTAL | 21 | 129 |
| EXTRA/NON-DEGREE COURSES | | | | |
| Dept. | Code | Course Name | CR. | ECTS |
| | | Extra/Non-degree | NC | |

| Course Group | Description |
|----------------------------|--|
| Departmental Elective I-II | Chemical Engineering courses under the GSNAS. |
| Area Elective I | ESYE 501, MSN 501 |
| Free Elective I | Unrestricted, by approval of advisor and CHEM department. |
| Extra/Non-degree | Optional non-credit (NC) courses that are not part of the program. |
| Remedial Courses | Undergraduate level courses offered by department. |