

Program structure for Master of Science Program in Petrochemical Technology

Total credits throughout the course 36 credits.

Study duration is not more than 4 years.

Program structure

| | | |
|------------------------------|----|---------|
| Total credits | 36 | credits |
| Total course work credits | 24 | credits |
| - Requirement course | 1 | credit |
| - Restricted elective course | 9 | credits |
| - Elective course | 14 | credits |
| Total thesis credits | 12 | credits |

Program Course

| | | |
|---|----|----------|
| Total course work credits | 24 | credits |
| <u>Requirement</u> | 1 | credit |
| course 6301606 Seminar | | 1(1-0-3) |
| <u>Restricted elective course</u> | 9 | credits |
| 6301601 Transport Phenomena | | 3(3-0-9) |
| 6301602 Advanced Chemical Engineering Calculations | | 3(3-0-9) |
| 6301603 Advanced Chemical Engineering Thermodynamic | | 3(3-0-9) |
| 6301604 Chemical Reaction Engineering | | 3(3-0-9) |
| | 14 | credits |
| <u>Elective course</u> | | |
| 6301501 Perspectives in Petrochemical Technology | | 1(1-0-3) |
| 6301617 Pollution Control | | 3(3-0-9) |
| 6301618 Select Topics in Petrochemical Technology | | 3(3-0-9) |
| 6301619 Colloid and Surface Science | | 3(3-0-9) |

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|---------|--|----------|
| 6301620 | Corrosion Engineering | 3(3-0-9) |
| 6301621 | Hazardous Waste Management | 3(3-0-9) |
| 6301625 | Petrochemical Industry: Technology and Economic | 3(3-0-9) |
| 6301631 | Surfactant Science and Technology | 3(3-0-9) |
| 6301632 | Alternative Energy Source | 3(3-0-9) |
| 6301634 | Independent Study | 3(0-0-9) |
| 6301635 | Research Methodology and Laboratory Safety | 1(1-0-3) |
| 6301636 | Environmental Sustainability | 1(1-0-3) |
| 6301637 | Advanced Process Dynamics and Control | 3(3-0-9) |
| 6301638 | Chemical Engineering Project Management | 3(3-0-9) |
| 6301639 | Process Quality Control and Management | 3(3-0-9) |
| 6301640 | Strategies for Creative Problem Solving | 1(1-0-3) |
| 6301641 | Energy Conservation in Industrial Process | 3(3-0-9) |
| 6301642 | Heterogeneous Catalysis | 3(3-0-9) |
| 6301643 | Sustainable Production | 3(3-0-9) |
| 6301644 | Energy Storage | 3(3-0-9) |
| 6301645 | Advanced Research Planning, Management and Publications in Research and Innovation | 3(3-0-9) |
| 6301646 | Process System Engineering | 3(3-0-9) |
| 6301648 | Sustainability of Industrial Process | 3(3-0-9) |
| 6301649 | Business Fundamentals in Energy Industries | 3(3-0-9) |
| 6301650 | Unconventional Energy: Technology, Applications, and Global Trend | 3(3-0-9) |
| 6301651 | Select Topic in Energy Technology | 3(3-0-9) |
| 6301652 | Biorefinery Technology and Applications | 3(3-0-9) |
| 6301653 | Information and Communication Technologies for Industrial Processing | 3(3-0-9) |

Thesis

12 credits

6301811

Thesis

12(0-48-0)