**FACULTY OF CHEMICAL TECHNOLOGIES**

*Specialty:* **NATURAL AND SYNTHETIC FUELS**

*Professional qualification:* **Chemical Engineer, Engineer, Chemical Technologist** (*According to the Bachelor Degree*)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subject code | **SUBJECTS** | **FULL-TIME STUDIES** | **PART-TIME STUDIES** | **Total credits** |
| Semester | Course Loads | Credits of self-training | Semester | Course Loads | Credits of self-training |
| Assessment | Teaching Loads | Credits | Assessment | Teaching Loads | Credits |
| Lectures | Laboratory work | Seminars | **Total** | Lectures | Laboratory work | Seminars | **Total** |

| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***13*** | ***14*** | ***15*** | ***16*** | ***17*** | ***18*** | ***19*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *Fundamental subjects: two from the optional block* | І | E | 30 | 30 | 0 | **60** | 2,0 | 2,0 | І | E | 14 | 16 | 0 | **30** | 1,0 | 3,0 | **4** |
|  | *Equalizing subjects from bachelor degree:* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| m415 | * Chemistry and Technology of Petroleum Processing
 | I | E | 20 | 10 | 0 | **30** | 1,0 | 1,0 | I | E | 10 | 5 | 0 | **15** | 0,5 | 1,5 | **2** |
| m416 | * Chemistry and Technology of Solid Fuels
 | I | E | 20 | 10 | 0 | **30** | 1,0 | 1,0 | I | E | 10 | 5 | 0 | **15** | 0,5 | 1,5 | **2** |
| M152 | * Chemmotology (Properties and application of fuels and lubricants)
 | I | E | 20 | 10 | 0 | **30** | 1,0 | 1,0 | I | E | 10 | 5 | 0 | **15** | 0,5 | 1,5 | **2** |
| m620 | Theory of Thermocatalytic Processes in Fuel Processing | I | E | 25 | 25 | 0 | **50** | 2,5 | 2,5 | I | E | 12 | 12 | 0 | **24** | 2,0 | 3,0 | **5** |
| m303 | Structure and Functional Properties of Additives for Fuels and Lubricants | I | E | 25 | 25 | 0 | **50** | 2,5 | 2,5 | I | E | 12 | 12 | 0 | **24** | 2,0 | 3,0 | **5** |
| m624 | Structure and Properties of Coals and Carbon Materials | I | E | 25 | 25 | 0 | **50** | 2,5 | 2,5 | ІI | E | 12 | 12 | 0 | **24** | 2,0 | 3,0 | **5** |
|  | **Hours per semester** |  |  |  |  |  | **210****(300)** |  |  |  |  |  |  |  | **102****(147)** |  |  | **19****(25)** |
| M062 | Ecological Problems in Fuels Processing and Use | II | E | 20 | 20 | 0 | **40** | 2,0 | 2,0 | II | E | 10 | 10 | 0 | **20** | 2,0 | 2,0 | **4** |
| M223 | Fundamentals of Processing and Applications of Hydrocarbon Gases | II | E | 20 | 20 | 0 | **40** | 2,0 | 2,0 | II | E | 10 | 10 | 0 | **20** | 2,0 | 2,0 | **4** |
|  | *Options: two subjects must be chosen* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M062 | * Coal Chemistry
 | II | E | 20 | 20 | 0 | **40** | 2,5 | 2,5 | III | E | 10 | 10 | 0 | **20** | 2,0 | 3,0 | **5** |
| m107 | * Complex Usage of Solid Fuels
 | II | E | 20 | 20 | 0 | **40** | 2,5 | 2,5 | III | E | 10 | 10 | 0 | **20** | 2,0 | 3,0 | **5** |
| m006 | * Alternative Fuels
 | II | E | 20 | 20 | 0 | **40** | 2,5 | 2,5 | III | E | 10 | 10 | 0 | **20** | 2,0 | 3,0 | **5** |
|  | *Options: one subject must be chosen* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| m075 | * Energy and Chemical Usage of Solid Fuels and Water
 | II | E | 18 | 18 | 0 | **36** | 2,0 | 2,0 | III | E | 10 | 10 | 0 | **20** | 2,0 | 2,0 | **4** |
| m109 | * Computer Design and Simulation in Petroleum Processing
 | II | E | 18 | 18 | 0 | **36** | 2,0 | 2,0 | III | E | 10 | 10 | 0 | **20** | 2,0 | 2,0 | **4** |
| m138 | Research Project  | ІІ | Pr | 0 | 90 | 0 | **90** | - | 6,0 | ІІІ | Pr | 0 | 50 | 0 | **50** | - | 6,0 | **6** |
|  | **Hours per semester** |  |  |  |  |  | **286** |  |  |  |  |  |  |  | **150** |  |  | **28** |
|  | Internship |  | Pr |  |  |  |  |  |  |  | Pr |  |  |  |  |  |  | **8** |
|  | Diploma Thesis – 20 weeks | ІІІ | DT |  |  |  |  |  |  | ІV | DT |  |  |  |  |  |  | **15** |