**FACULTY OF CHEMICAL TECHNOLOGIES**

*Specialty:* **PULP, PAPER AND PACKAGE** Approved: /prof. Dr. Mitko Georgiev /

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 | 15 | 15 | 0 | **30** | 1,0 | 3,0 | **4** |
|  | *Equalizing subjects from bachelor degree:* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b421 | * Wood Chemistry
 | І | E | 15 | 10 | 0 | **25** | 1,0 | 1,0 | І | E | 8 | 5 | 0 | **13** | 0,6 | 1,4 | **2** |
| b446 | * Fundamentals of Pulping Processes
 | І | E | 20 | 10 | 0 | **30** | 1,0 | 1,0 | І | E | 10 | 5 | 0 | **15** | 0,6 | 1,4 | **2** |
| b445 | * Fundamentals of PapermakingTechnology
 | І | E | 25 | 10 | 0 | **35** | 1,0 | 1,0 | І | E | 13 | 5 | 0 | **18** | 0,6 | 1,4 | **2** |
| m732 | Physical-Chemical Processes in Pulping and Bleaching | І | E | 35 | 35 | 0 | **70** | 3,0 | 4,0 | І | E | 18 | 17 | 0 | **35** | 2,0 | 5,0 | **7** |
| m454 | Special Types of Paper | І | E | 28 | 27 | 0 | **55** | 2,4 | 3,6 | ІІ | E | 14 | 13 | 0 | **27** | 1,5 | 4,5 | **6** |
| m757 | Wood Polymer Composites and Modification of Wood and Cellulose  | І | E | 28 | 27 | 0 | **55** | 2,4 | 3,6 | ІІ | E | 14 | 13 | 0 | **27** | 1,5 | 4,5 | **6** |
|  | **Hours per semester** |  |  |  |  |  | **240****(330)** |  |  |  |  |  |  |  |  |  |  | **23****(29)** |
| m753 | Chemical Additives in Pulp and Papermaking Production | ІІ | E | 25 | 25 | 0 | **50** | 2,0 | 3,0 |  ІІ | E | 13 | 12 | 0 | **25** | 1,0 | 4,0 | **5** |
| m754 | Environmental Processes in the Pulp and Paper Industry | ІІ | E | 25 | 25 | 0 | **50** | 2,0 | 3,0 |  ІІІ | E | 13 | 12 | 0 | **25** | 1,0 | 4,0 | **5** |
| m433 | Packaging Construction and Design  | ІІ | E | 15 | 15 | 0 | **30** | 1,2 | 2,8 | ІІІ | E | 8 | 7 | 0 | **15** | 0,8 | 3,2 | **4** |
| m756 | Conservation and Restoration of Paper | ІІ | E | 20 | 20 | 0 | **40** | 1,6 | 2,4 | ІІІ | E | 10 | 10 | 0 | **20** | 1,0 | 3,0 | **4** |
| m136 | Research Project | ІІ | Pr. | 0 | 90 | 0 | **90** | 3,0 | 3,0 | ІІІ | Pr. | 0 | 45 | 0 | **45** | 2,0 | 4,0 | **6** |
|  | **Hours per semester** |  |  |  |  |  | **260** |  |  |  |  |  |  |  |  |  |  | **24** |
|  | Practice in Industry |  | Pr. |  |  |  |  |  |  |  | Pr. |  |  |  |  |  |  | **8** |
|  | Diploma Thesis – 20 weeks | ІІІ | DT |  |  |  |  |  |  | ІV | DT |  |  |  |  |  |  | **15** |