| | BASIC DATA |
|--------------------------|-------------------|
| Name of the programme: | Space Engineering |
| Degree awarded: | MSc |
| Name of qualification: | Space Engineer |
| Field of the programme: | |
| Branch of the programme: | |

| | | 1. sen | nester | | | 2. sen | nester | | | 3. sen | nester | | 4. semester | | | | | |
|-----------------------------------------|-----------|------------------------|---------|----------------------|--------|-------------------|---------|----------------------|---|-------------------|---------|----------------------|-------------|-------------------|---------|----------------------|--|-------------------|
| Courses | NEPTUN ID | PRE-REQUISITE (if any) | LECTURE | PRACTICA L COURSE | CREDIT | REQUIRE MENTS* | LECTURE | PRACTICA L COURSE | | REQUIRE MENTS* | LECTURE | PRACTICA L COURSE | | REQUIRE MENTS* | LECTURE | PRACTICA L COURSE | | REQUIRE MENTS* |
| CORE COURSES | | | | | | | | | | | | | | | | | | |
| Applied physics | | | 2 | 2 | 4 | е | | | | | | | | | | | | |
| Applied mathematics | | | 2 | 2 | 4 | е | | | | | | | | | | | | |
| Astrochemistry | | | 2 | 0 | 2 | е | | | | | | | | | | | | |
| Materials for spacecraft | | | 3 | 1 | 4 | е | | | | | | | | | | | | |
| Materials Equilibria | | | 2 | 0 | 4 | е | | | | | | | | | | | | |
| Knowledge of space quality and | | | 3 | 2 | 5 | е | | | | | | | | | | | | |
| standards Space law and economics | | | 2 | 0 | 2 | е | | | | | | | | | | | | |
| Vacuum physics and technology | | | 2 | 1 | 3 | е | | | | | | | | | | | | |
| Surface properties | | | | | | | 3 | 1 | 4 | е | | | | | | | | |
| Astronomy and Planetology | | | | | | | 3 | 0 | 3 | е | | | | | | | | |
| Space industry and history | | | | | | | 2 | 0 | 2 | е | | | | | | | | |
| Space project management | | | | | | | 3 | 0 | 3 | е | | | | | | | | |
| Space technology | | | | | | | 2 | 0 | 2 | е | | | | | | | | |
| Material property design | | | | | | | 2 | 1 | 3 | е | | | | | | | | |

| Cleanroom | | | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| technologies | | | | | | 2 | 1 | 3 | е | | | | | | | | |
| Solidification and gravity | | | | | | 2 | 1 | 3 | е | | | | | | | | |
| Material knowledge, degradation | | | | | | 2 | 1 | 3 | е | | | | | | | | |
| Thermooptical properties | | | | | | | | | | 2 | 1 | 3 | е | | | | |
| Thermological, strength and dynamic simulation | | | | | | | | | | 2 | 2 | 4 | m | | | | |
| Material selection | | | | | | | | | | 2 | 1 | 3 | е | | | | |
| Precision machining | | | | | | | | | | 0 | 2 | 2 | m | | | | |
| Construction design | | | | | | | | | | 2 | 0 | 2 | m | | | | |
| Measurement technology | | | | | | | | | | | | | | 0 | 2 | 2 | m |
| Space mining and raw material processing | | | | | | | | | | | | | | 2 | 0 | 2 | е |
| Space qualification tests | | | | | | | | | | | | | | 3 | 0 | 3 | е |
| Soldering, gluing | | | | | | | | | | | | | | 2 | 1 | 3 | m |
| Space-borne Remote Sensing | | | | | | | | | | | | | | 1 | 1 | 2 | m |
| Applied geophysical and data processing methods in space exploration | | | | | | | | | | | | | | 1 | 1 | 2 | е |
| Communication in space systems | | | | | | | | | | | | | | 2 | 0 | 2 | е |
| SPECIALIZATION COURSES | | | | | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | | | | | |
| OPTIONAL COURSES | | | | | | | | | | | | | | | | | |
| optional subject I. | | 2 | 0 | 2 | r | | | | | | | | | | | | |
| optional subject II. | | | | | | 2 | 0 | 2 | r | | | | | | | | |

| optional subject III. | | | | 2 | 0 | 2 | r | | | | | | | | |
|--------------------------|--|--|--|---|---|---|---|---|-----|----|---|---|----|----|---|
| DISSERTATION/THESIS WORK | | | | | | | | | | | | | | | |
| MSc Thesis I. | | | | | | | | 0 | 15 | 15 | r | | | | |
| MSc Thesis II. | | | | | | | | | | | | 0 | 15 | 15 | r |
| OTHER/SPECIAL COURSES | | | | | | | | | | | | | | | |
| Professional practice | | | | | | | | 0 | 160 | 0 | r | | | | |

^{*}Requirements: (e)exam/ (m) practical mark/ (s)signature / (r) report/essay