

Profesionālā maģistra studiju programma "Elektronika" studiju plāns

| Studiju kursi | Docētājs (vārds, grāds, amats) | KP / ECTS | Programma 60 KP | | Programma 120 KP | | | |
|---|---|------------------------------------|-----------------------|------------|-----------------------|------------|-----------|----------|
| | | | Plānojums semestrī | | Plānojums semestrī | | | |
| | | | 1 | 2 | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Studiju kursi, kas nodrošina jaunāko sasniegumu apguvi nozares teorijā un praksē | | 12 (18) vai 33 (43) | 12 | 0 | 17 | 16 | 0 | 0 |
| Satelīt komunikāciju sistēmas | Mārcis Donerblics (Mg. sc. ing., lect.) | 6 | 6 | | 6 | | | |
| Heterogēnās skaitļošanas sistēmas | Jānis Šate (Mg. sc. ing., lect.) | 6 | (6) | | | (6) | | |
| Radiofrekvenču un mikroviļņu ierīces | Mārcis Bleiders (Mg. sc. ing., lect.) | 6 | (6) | | | (6) | | |
| Automātiskās vadības sistēmas | Jānis Šate (Mg. sc. ing., lect.) | 6 | | | | 6 | | |
| ARM arhitektūras mikrokontrolieru programmēšana | Gints Dreifogels (Mg. sc. ing., lect.) | 5 | | | (5) | | | |
| Ievads LabVIEW un tā pielietojumi elektronikā | Mārcis Donerblics (Mg. sc. ing., lect.) | 5 | | | (5) | | | |
| Iegultās operētājsistēmas | Artūrs Orbidāns (Mg. sc. ing., lect.) | 4 | | | | 4 | | |
| Programmējamās integrētās shēmas | Jānis Šate (Mg. sc. ing., lect.) | 6 | | | 6 | | | |
| Pētnieciskā darba, jaunrades darba, projektēšanas darba un vadībzinību studiju kursi | | 9 vai 18 | 9 | 0 | 13 | 5 | 0 | 0 |
| Elektronikas inženierijas projektu vadība | Matīss Maltisovs (Ph. D., doc.) | 6 | 6 | | 6 | | | |
| Elektronikas inženierijas pētniecības projekts | Jānis Šate (Mg. sc. ing., lect.) | 5 | | | | 5 | | |
| Zinātnisko pētījumu metodoloģija | Linda Gulbe (Dr. sc. comp., doc.) | 3 | 3 | | 3 | | | |
| Komunikācijas prasmes | Guntars Dreijers (Dr. Philol., assoc. prof.) | 4 | | | 4 | | | |
| Papildus apgūstams* | | 3* | 0 | (3) | 0 | (3) | 0 | 0 |
| Civilā aizsardzība un vides ilgtspēja* | Ivo Lemšs (Mg.geogr.) | 3 | | 3 | | 3 | | |
| Izvēles daļas kurss** | | 3** | (3) | 0 | (3) | 0 | 0 | 0 |
| Brīvās izvēles kurss** | | 3 | 3 | | 3 | | | |
| Prakse | | 9 vai 39 | 9 | 0 | 0 | 9 | 30 | 0 |
| Prakse | Jānis Šate | 9 | 9 | | | 9 | | |

| | | | | | | | | |
|--|-------------------------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|
| | (Mg. sc. ing., lect.) | | | | | | | |
| Profesionālā prakse | Jānis Šate (Mg. sc. ing., lect.) | 30 | | | | | | 30 |
| Valsts pārbaudījums, kura sastāvdaļa ir maģistra darba vai diplomdarba izstrādāšana un aizstāvēšana | | 30 | 0 | 30 | 0 | 0 | 0 | 30 |
| Maģistra darbs | Jānis Šate (Mg. sc. ing., lect.) | 30 | | 30 | | | | 30 |
| Kopā semestrī: | | | 30 | 30 | 30 | 30 | 30 | 30 |
| Kopā programmā: | | | 60 | | 120 | | | |

*Apgūstams papildus, ja nav apgūts iepriekš (atbilstība Vides aizsardzības likuma un Civilās aizsardzības un katastrofas pārvaldīšanas likuma prasībām). Vides aizsardzības likuma un Civilās aizsardzības un katastrofas pārvaldīšanas likuma noteiktās prasības tiek ievērotas, studējošajiem piedāvājot studiju kursu Civilā aizsardzība un vides ilgtspēja (3 KP), ja viņi tās nav apguvuši zemāka līmeņa studiju programmā.

**Papildus studiju programmas plānā norādītajiem studiju kursiem un apjomam studentiem ir tiesības sastādīt un apgūt papildus brīvās izvēles daļu 3KP apjomā.

Plan of the Professional master's study programme "Electronics"

| Title of the course/module | Name of the responsible lecturer/docent | CP / ECTS | 60 CP Programme | | 120 CP Programme | | | |
|---|--|-----------------------------------|-----------------------|----------|-----------------------|-----------|----------|----------|
| | | | Planning per semester | | Planning per semester | | | |
| | | | 1 | 2 | 1 | 2 | 3 | 4 |
| <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> | <i>8</i> | <i>9</i> |
| Theoretical and professional courses of the field | | 12 (18) or 33 (43) | 12 | 0 | 17 | 16 | 0 | 0 |
| Satellite Communication Systems | Mārcis Donerblics (Mg. sc. ing., lect.) | 6 | 6 | | 6 | | | |
| Heterogeneous Computing Systems | Jānis Šate (Mg. sc. ing., lect.) | 6 | (6) | | (6) | | | |
| Radiofrequency and Microwave Devices | Mārcis Bleiders (Mg. sc. ing., lect.) | 6 | (6) | | (6) | | | |
| Automatic Control Systems | Jānis Šate (Mg. sc. ing., lect.) | 6 | | | 6 | | | |
| Programming of ARM Architecture Microcontrollers | Gints Dreifogels (Mg. sc. ing., lect.) | 5 | | | (5) | | | |
| Introduction to LabVIEW and its Applications in Electronics | Mārcis Donerblics (Mg. sc. ing., lect.) | 5 | | | (5) | | | |
| Embedded Operating Systems | Artūrs Orbidāns (Mg. sc. ing., lect.) | 4 | | | 4 | | | |
| Programmable Integrated Circuits | Jānis Šate (Mg. sc. ing., lect.) | 6 | | | 6 | | | |
| Courses in research, creative work, design work and management studies | | 9 or 18 | 9 | 0 | 13 | 5 | 0 | 0 |

| | | | | | | | | |
|---|--|----------------|------------|------------|------------|------------|-----------|-----------|
| Electronics Engineering Project Management | Matīss Maltisovs (Ph. D., doc.) | 6 | 6 | | 6 | | | |
| Electronics Engineering Research Project | Jānis Šate (Mg. sc. ing., lect.) | 5 | | | | 5 | | |
| Scientific Research Methodology | Linda Gulbe (Dr. sc. comp., doc.) | 3 | 3 | | 3 | | | |
| Communication Skills | Guntars Dreijers (Dr. Philol., asoc. prof.) | 4 | | | 4 | | | |
| Supplementary* | | 3* | 0 | (3) | 0 | (3) | 0 | 0 |
| Civil Protection and Environmental Sustainability* | Ivo Lemšs (Mg.geogr.) | 3 | | 3 | | 3 | | |
| Free elective part ** | | 3** | (3) | 0 | (3) | 0 | 0 | 0 |
| Free elective part study course** | | 3 | 3 | | 3 | | | |
| Internship | | 9 or 39 | 9 | 0 | 0 | 9 | 30 | 0 |
| Internship | Jānis Šate (Mg. sc. ing., lect.) | 9 | 9 | | | 9 | | |
| Professional internship | Jānis Šate (Mg. sc. ing., lect.) | 30 | | | | | 30 | |
| National examination, which includes the elaboration and defense of a master's thesis or diploma project | | 30 | 0 | 30 | 0 | 0 | 0 | 30 |
| Master thesis | Jānis Šate (Mg. sc. ing., lect.) | 30 | | 30 | | | | 30 |
| Total per semester: | | | 30 | 30 | 30 | 30 | 30 | 30 |
| Total in the programme: | | | 60 | | 120 | | | |

*To be completed in addition to the course if not previously completed (Compliance with the requirements of the Environmental Protection Law and the Civil Protection and Disaster Management Law). The requirements of the Law on Environmental Protection and the Law on Civil Protection and Disaster Management are met by offering students the study course “Civil Protection and Environmental Sustainability” (3 CP), if they have not taken them in a lower-level study programme.

**In addition to the courses and the amount of study specified in the programme plan, students have the right to draw up and study an additional free elective part study course of 3 CP.