

| Qualifications in NQF-HETR | | Program Outcomes (POs) | | | | | | | | | |
|----------------------------------------------------------|------|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | P01 | P02 | P03 | P04 | P05 | P06 | P07 | P08 | P09 | P10 |
| Knowledge | KNW1 | ■ | | ■ | | | | | | | |
| | KNW2 | | ■ | | | ■ | | | | | |
| Skills | SKL1 | | | ■ | | | | | | | |
| | SKL2 | ■ | ■ | | | | ■ | | | | |
| | SKL3 | | | ■ | | | | | | | |
| | SKL4 | | | | | ■ | | | | | |
| | SKL5 | ■ | ■ | | | | | ■ | | | |
| Competence to Work Independently and Take Responsibility | ACR1 | | | | ■ | | | ■ | | | |
| | ACR2 | | | | | | | | ■ | | ■ |
| | ACR3 | | | | | | | | | ■ | |
| Learning Competence | LLC1 | | | | | | | ■ | | | |
| | LLC2 | | | | | | ■ | | ■ | | |
| | LLC3 | | | | | | | | ■ | | |
| | LLC4 | | | | ■ | | | ■ | | | |
| Competence (Communication and | CSC1 | | | | | | | | | | ■ |
| | CSC2 | | | | | ■ | | | | | |
| Field Specific Competence | OVC1 | | | | | | | | | ■ | |
| | OVC2 | ■ | ■ | | | ■ | | | | | ■ |

| DOCTORATE DEGREE QUALIFICATIONS FOR ENGINEERING (ACADEMICALLY ORIENTED) | | | | | | |
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| 8 th Level (DOCTORATE DEGREE) | | | | | | |
| | | | COMPETENCES | | | |
| NQF-HETR LEVEL | KNOWLEDGE -Theoretical -Conceptual | SKILLS -Cognitive -Practical | Autonomy & Responsibility Competence (ACR) | Learning to Learn Competence (LLC) | Communication and Social Competence | Occupational and/or Vocational Competence (OVC) |
| 8 th CYCLE DOCTORATE —— EQF-LLL: 8 th CYCLE —— QF-EHEA: 3 rd Cycle | Qualifications that signify completion of the seventh cycle are awarded to students who | | | | | |
| | KNW 1- have utmost knowledge on basic sciences, mathematics, and engineering sciences; and apply this knowledge. KNW 2- have extensive knowledge in the field, including recent developments. | SKL 1-have access to the most recent information in the field; have advanced methods and skills required to conduct research, using this information. SKL 2- conduct a comprehensive study that either develops a new scientific method or technological product/process, or applies a known method in another field, bringing innovation to science or technology. SKL 3- define and apply basic sciences, mathematics, and engineering sciences at the utmost level. SKL 4- have profound and extensive knowledge in the field, including recent developments. SKL 5- independently design, apply, finalize and manage the process | ACR 1 - contribute to national and international literature of science and technology, publishing the outcomes of academic research in prestigious academic journals. ACR 2- conduct a comprehensive study that either develops a new scientific method or technological product/process, or applies a known method in another field, bringing innovation to science or technology. ACR 3- evaluate scientific, technological, social and cultural developments and impart such knowledge to the society, in consideration of scientific impartiality and ethical responsibility. | LLC 1 - design, apply, finalize and manage independently the process of an original research. LLC 2- have access to the most recent information in the field; have advanced methods and skills required to conduct research, using this information. LLC 3- conduct a comprehensive study that either develops a new scientific method or technological product/process, or applies a known method in another field, bringing innovation to science or technology. LLC 4- contribute to national and international literature of science and technology, publishing the outcomes of academic research in prestigious academic | CSC 1 - make critical analysis, synthesis and evaluation of ideas and developments in the related field. CSC 2- communicate effectively with specialist audience as well as with larger scientific and social communities; and communicate and discuss in oral and written form in a foreign language at minimum C1 level, as defined by the European Language Portfolio. | OVC I- evaluate scientific, technological, social and cultural developments and impart such knowledge to the society, in consideration of scientific impartiality and ethical responsibility. OVC 2- communicate effectively with specialist audience as well as with larger scientific and social communities; and communicate and discuss in oral and written form by speaking a foreign language at minimum C1 level, as defined by the European Language Portfolio. |