## MASTER OF ENGINEERING

DEGREE PROGRAMME IN TECHNOLOGY COMPETENCE MANAGEMENT, 60 ECTS CR

Master's Degree Programme in Technology Competence Management is aimed at Engineering graduates already working in the field and wishing to enhance their professional expertise and competences. The programme, jointly implemented by JAMK University of Applied Sciences and Seinäjoki University of Applied Sciences (SeAMK) brings together top-quality Finnish expertise and know-how in the area of Technology. The principles of learning lean on the students' previous studies and work experience, which ensure the working life relevance of the programme.



**TARGET GROUP:** The programme is intended for engineers and other experts (see below) working in technology companies and organizations who wish to develop their skills in leadership and other relevant expertise and who aim to go ahead with their career.

**KEY LEARNING OUTCOMES:** The purpose of the programme is to extend and enhance graduates'

professional expertise with adequate theoretical knowledge to manage and develop expert organizations and to manage and carry out demanding development projects.

### **COMPLETION OF STUDIES:**

One year (full-time) or 1.5-2 years (part-time; studying while working). The programme can be implemented in Finland or in the customer's country of origin. Various e-learning methods can be used in the flexible implementation of the programme.

In the context of higher education studies in Finland one ECTS credit means 27 hours of student's study, which consists of conducting lectures, online courses, individual learning and assignments.







### **COURSE STRUCTURE:**

### ADVANCED STUDIES 30 ECTS Compulsory studies 25 ECTS

- Development and Research 5 ECTS
- Competence Management 5 ECTS
- Strategic Management 5 ECTS
- Advanced Management Accounting 5 ECTS
- Project Management 5 ECTS

**Elective studies, 5 ECTS.** The programme content can be tailored for the needs of the student group and it can include, for example, the following topics in the elective studies:

- Industrial Internet
- Management of Product Development
- Logistics
- Life-cycle Management
- Leadership Skills of the Future
- Customer Relationship Management

### Master's Thesis 30 ECTS

**Learning assessment:** Learning outcomes are assessed in relation to the course's learning objectives. Courses are assessed either on the scale 1-5: 5 (excellent), 4 (very good), 3 (good), 2 (satisfactory) and 1 (adequate), or either a Pass (P) or a Fail (0). The course is failed with a Fail (0).

**Mode of study:** Studies consist of lectures, distance learning and e-learning as well as project works.

**ADMISSION CRITERIA:** Those selected are required to possess a Bachelor's degree in a relevant field of Engineering (BE). In addition, sufficient English language skills are required.







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**JAMK University of Applied Sciences** 

### SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

(SEAMK) is a multidisciplinary institution of higher education in West Finland. It is an efficient actor in education and research as well as in development and innovation (RDI) together with working life, organizations in the region and partners all over the world. The number of full-time students is 5000.

SeAMK has 19 Bachelor and 7 Master degree programmes, some of the degree programmes are totally taught in English. Double degree programmes are available in the fields of technology and business. In addition there are several short programmes. Internationalization is a strategic aim of SeAMK. More than 200 partner universities and networks in 50 different countries belong to the comprehensive internationalization.

THE SCHOOL OF TECHNOLOGY offers versatile and qualified education in engineering. An excellent learning environment is created by our qualified staff and modern laboratories with cutting edge technology. Studies in the engineering field have been available in Seinäjoki since 1967. The School of Technology

provides five different Bachelor of Engineering degrees in the following programmes:
Automation Engineering, Construction
Engineering, Construction Site Management,
Information Technology and Mechanical
Engineering. Additionally the School of
Technology offers Master Degree programmes in Construction Engineering and in Technology
Competence Management. The School has also a double degree programme with a
German University.

The strategic focus areas of the School in education and R&D are Industrial Internet and Digital Manufacturing. In these fields the School has received several national awards in 2016 and, as the only Finnish university, also received the status of Digital Innovation Hub in a European Union Programme. In these focus areas the School has also made major laboratory investments for the new learning environments as well as for the industry demonstrations.

JAMK UNIVERSITY OF APPLIED SCIENCES (JAMK) is a multidisciplinary higher education institution with eight different fields of study. JAMK is located in the city of Jyväskylä in Central Finland and it has more than 8000 students from over 70 countries. JAMK's four Schools offer Bachelor and Master-level degree education, open studies, continuing education and vocational teacher education. JAMK is engaged in extensive international cooperation manifested, for example, in education and project activities. Furthermore, JAMK actively implements research and development activities that serve education and support both working life and regional development.

THE SCHOOL OF TECHNOLOGY at JAMK has significant proficiency in technology education. It has provided high-quality Engineering education and trained professionals for the field of technology for over 50 years. Furthermore, the School has more than 20 years of experience in running degree programmes in English and participating in international projects.

The School of Technology provides ten different Bachelor of Engineering degrees in the following programmes: Mechanical Engineering, Electrical and Automation
Engineering, Energy and Environment,
Logistics, Media, Software, Information and
Communication Technology, Civil Engineering
and Agriculture and Rural Industries. The
Degree Programmes in Logistics Engineering
and Mechanical Engineering have been
granted EUR-ACE quality labels.

In addition, the School of Technology offers six different Master's Degree Programmes: Technological Competence Management, Logistics, Automation, Product Life Cycle Management, Cyber Security and Bioeconomy Development (Master of Natural Resources).

Bioeconomy and Cybersecurity are strategic focus areas responding to national and international challenges. The focus in applied RDI work is on mechanical, energy, automation, logistics and information technology as well as on civil engineering along with development and piloting of cooperation projects with the surrounding industries. The School educates engineers and agrologists and creates new work models and service concepts for the surrounding industries helping them to maintain their competitiveness.