

Description of the appointment process of a tenure track position (assistant/associate professor)

Software Construction

Location: School of Business and Management, Software Engineering

The Rector has approved the description and initiated the appointment process on
26 February 2018

1 BACKGROUND	2
2 QUALIFICATIONS	3
3 APPLYING FOR THE POSITION	4
4 EXPERT EVALUATORS	4
5 INTERVIEW AND TRIAL LECTURE	5
6 APPOINTMENT	5
TENURE TRACK APPOINTMENT CRITERIA	6

Applied statutes

Universities Act (558/2009)
Government decree on universities (770/2009)

Regulations of Lappeenranta University of Technology (22 September 2017)

Decision on the tenure track system of Lappeenranta University of Technology (11 May 2016)

Additional information

Further information on the duties of the assistant/associate professor is provided by Professor Ajantha Dahanayake, tel. +358 50 324 5353, Ajantha.dahanayake@lut.fi. On questions regarding appointment, please turn to HR Director Pirkko Partanen, tel. +358 400 540 798, pirkko.partanen@lut.fi.

1 Background

Lappeenranta University of Technology (LUT) has pioneered as a university combining technology and business since 1969. Our international, entrepreneurially minded scientific community consists of some 4200 Bachelor's and Master's students, 440 doctoral students and 860 staff members. There are close to 70 different nationalities at our university. One third of our incoming students are foreign nationals. In 2017, our budget was around 76 million euros, 39% being supplementary funding. The focus areas of LUT's research and education are clean energy, the circular economy, and sustainable business and entrepreneurship.

LUT's researcher resources are allocated to three Schools: the LUT School of Energy Systems, the LUT School of Engineering Science and the LUT School of Business and Management.

The internationally awarded Green Campus we share with Saimaa University of Applied Sciences will be further developed as a major research infrastructure and a place for piloting and demonstrating our research and innovation. It also functions as a hub for our renewed education and intensified cooperation with enterprises.

LUT School of Business and Management, LBM

Our mission is to educate research-based problem solvers in the fields of business, industrial management and software engineering. We do this by creating and sharing business-relevant knowledge for the benefit of students, businesses, the academic community and the society at large.

In our 2020 vision, we are internationally recognised for our impact on sustainable value creation – enabled by new technologies and entrepreneurial spirit.

Our research and education are characterised by an entrepreneurial, global and sustainable mindset. We focus on understanding the factors that lead to sustainable value creation, i.e. approaches that enable the growth, renewal and internationalisation of firms in a way that is economically, ecologically and socially sustainable. We seek better to understand the role of businesses and management in addressing the key problems of humankind. In particular, we focus on changes and growth opportunities that are driven by new and digital technologies and new forms of organising. Our core strength is close collaboration with business life combined with strong theoretical, analytical and methodological expertise.

The LUT School of Business and Management is a strong research unit of 35 professors, 90 post-doctoral researchers and 50 doctoral students.

Position

We are now looking for an assistant professor or associate professor for the Software Engineering competence area, which currently has three professors. Software construction is closely related to software engineering and data management within the competence area.

The open position reinforces LBM's research and education in software engineering and digital transformation. The Bachelor's programme in software engineering (SWE) and the Master's programme in software engineering and digital transformation (SWE & DT) are ASIIN accredited. The successful candidate is expected to contribute significantly to the Bachelor's and Master's programme in the software engineering discipline.

Digitalisation and business analytics compose one of LBM's three areas of strength and is expected to grow the most. In recent years, LBM has invested in research in the field e.g. by establishing two research laboratories: Co-Design, Experimentation and Innovation with User

Experiences (CODER) and Mobile User Experience and Emotions Measurement (MUXEM). The third research laboratory (Management Research Lab) is currently being planned.

The assistant/associate professor in software construction

The LUT Software Engineering research group is looking for a doctoral graduate who is comfortable working in the areas below. We are prepared to negotiate the job description with the suitable candidate to find a solution satisfactory to both parties. The normal teaching workload is four courses per year.

Examples of suitable research areas

- Software development environments, technologies, and tools
- Development of web and/or mobile applications
- Software development processes and methodologies
- Design oriented research, e.g. patterns, architectures, innovation, and sustainability
- Software entrepreneurship
- Software engineering and socio-technical research

The teaching duties may cover the following areas, depending on the expertise of the candidate

- Operating systems
- Software development and software design
- Database systems
- Distributed systems
- Web user interface design and HCI
- Software maintenance
- Digital platforms

The duties related to the field of research include the following:

- High-impact international research
- Preparation of national and international research and education projects
- Supervision of final theses and postgraduate studies
- General administrative work related to the university's operation.

The position is situated at the assistant/associate levels of the tenure track and will be filled through an open application process for a fixed term of four years. The position starts with a four-month trial period.

2 Qualifications

According to the administrative regulations of Lappeenranta University of Technology, adopted on 22 September 2017, an associate professor is required to have a doctorate, high-level scientific qualifications, experience in heading scientific research, the ability to acquire funding, the ability to provide high-level instruction based on research, the ability to supervise final theses, proof of international cooperation in his/her field of research, and when relevant to the duties of the position, practical experience in the field of the professorship.

Practical experience in the field is a requirement in this position.

The applicant must have research and teaching merits, proof of effective research and the acquisition of external research funding, and international experience. In the appointment, attention will be paid to the applicant's merits, which are defined in the tenure track system of Lappeenranta University of Technology (Annex).

Under the universities decree (770/2009), a person in a teaching and research position at a university is required to master the language, Finnish or Swedish, in which he or she teaches. According to the university regulations, section 16, a foreign or Finnish citizen who is not a

native of Finland may be appointed to a teaching or research position regardless of the fact that he or she has not demonstrated skills in Finnish and/or Swedish. An applicant for a professorship may demonstrate his or her language skills with a language certificate accepted by the academic council and/or in an interview.

According to the university regulations, section 16, professors are required to have the language skills needed for the successful completion of their duties. In this position, oral and written fluency in English is required. The applicant must also agree to acquire Finnish skills sufficient for the completion of the duties in a reasonable amount of time, which is determined by the supervisor and the appointed applicant together.

3 Applying for the position

Application

The application must specify the tenure track level applied to. The deadline for applications is indicated in the vacancy announcement. The application and material for expert assessors should primarily be submitted through the online recruitment system mentioned in the vacancy announcement or e-mailed to the university (recruitment@lut.fi).

The application and its appendices must be in English. The application must include:

- A curriculum vitae
- A copy of the applicant's doctoral diploma
- A full list of publications, including the total number of publications in the Web of Science and Scopus databases, the total number of citations, the h-index and Scopus ID. In addition, equivalent information from the applicant's Google Scholar profile is required
- Publications for evaluation by experts (max. 10)
- A separate list of the publications submitted for expert evaluation
- A teaching portfolio or an equivalent account of the applicant's teaching qualifications
- An account of the applicant's merits and activities of significance to the vacancy (max. 3 pages)

Contact information

The applicant must give the university an e-mail address at which he or she can be reached. If the applicant does not wish to be contacted by e-mail, he or she must give a postal address at which he or she can be reached during the appointment process. The university prefers e-mail.

4 Expert evaluators

Selection of experts

The experts must be impartial. Before the selection of expert evaluators, the applicants must be provided the possibility to comment on their disqualification.

Based on the proposal of the selection committee, the dean invites at least three experts of an international level to submit a statement on the qualification of the applicants. Staff members of Lappeenranta University of Technology may not be invited as expert evaluators. To the extent possible, the experts should be chosen with the applicants' fields of specialisation in mind and with a view to impartiality

Sections 27-29 of the Administrative Procedure Act (434/2003) apply to the disqualification of an expert evaluator.

Applications forwarded to expert evaluators

The preparatory committee may limit the number of applications forwarded to expert evaluators if there are four applicants or more. At least three applications must be forwarded to the experts. The applications may be limited to the most suitable candidates for the position in the view of the person making the decision. The preparatory committee must present grounds for its decision. The applicants will be informed if any applications are excluded from the evaluation.

Expert statements

The expert evaluators must give their statements in writing within two months. More specific dates will be sent to the evaluators along with instructions. In their statement, the experts must evaluate especially the scientific qualification of the applicant, and if possible, also other merits related to the professorship, and rank the applicants in order of preference.

The experts may also discuss the matter amongst themselves and give a collective statement. Expert evaluators may not take part in the appointment process at a later stage.

The statement must be submitted to the university (separate instructions issued) by the deadline.

5 Interview and trial lecture

The applicants deemed qualified for the position by the experts will be invited to an interview. The selection committee may ask the applicants to give a public trial lecture.

6 Appointment

The tenure track committee makes a proposal to the dean concerning the appointment. The dean then makes a proposal to the Rector on filling the position or leaving it vacant. The proposal shall be based on the merits presented by the applicants, expert statements, possible trial lectures and other related matters.

The evaluation of the applicant's qualifications takes into account scientific publications and other research results with scientific value, pedagogical skills, teaching experience, teaching-related merits, a trial lecture if needed, the number of supervised dissertations, and management and leadership skills. In addition, the evaluation takes into consideration the applicant's activity in the science community, success in acquiring research funding, scientific work abroad, and international positions of trust.

The Rector decides either to appoint an applicant or to leave the position vacant.

The appointment proposal may be made or let lapse even if all of the experts have not submitted their statements, provided that the time limit for the statements has expired, at least three experts have submitted their statements, and the impartial treatment of the applicants is not compromised by doing so.

After the Rector has made the appointment decision, an employment contract is concluded with the appointed person. If no employment contract is concluded, the Rector may, based on the proposal by the dean, make a new decision and appoint another applicant. The Rector may also leave the position vacant. When the employment contract is concluded with the person appointed, the final decision is made known to all applicants.

Tenure track appointment criteria

The positions below require a doctorate in an applicable field, a research field that fits the LUT strategy (see LUT Strategy 2020), a goal-oriented plan for the work in question, teaching experience and an up-to-date teaching portfolio. Table (at the end of this document) can be applied to the evaluation of teaching merits.

In international recruitments, the evaluation must take into account that applicants from outside of Finland and Europe may not have been involved in Finnish or European research projects and have thus not taken into consideration the Finnish Publication Forum classification. Such applicants are evaluated in terms of their success in acquiring competitive funding through their own national channels or through international ones, and in terms of impact factors of scientific journals in their own field. Only in promotion and tenure reviews can the same criteria be applied to them as to Finnish persons.

The following merits of the applicant must be taken into account in the appointment:

Assistant professor:

- Scientific publications in journals with a national Publication Forum rating.
- Contacts with one's own international scientific community.
- Potential to take part in the acquisition of external funding in the research group and apply for post-doctoral researcher posts of the Academy of Finland.
- Potential to take part in teaching and the supervision of final theses.

Associate professor:

- Successful publication history after the doctoral defence, target of 3 publications/year with a national Publication Forum rating.
- Proof of participation in international cooperation.
- Successful acquisition of external funding and acting as e.g. a project manager in externally funded projects.
- Applying for post-doctoral researcher posts of the Academy of Finland.
- Participation in the supervision of doctoral students.
- Participation in the commercialisation of research results.
- Participation in teaching, the development of teaching and the supervision of final theses.

Taking teaching merits into account

The average value of criteria in Table is calculated to evaluate teaching merits. The evaluation may include five to seven criteria depending on the decision of the tenure track committee – not necessarily all seven criteria.

Evaluation matrix for teaching merits

	Poor	Fair	Good	Very good	Excellent
1. Teaching experience	Only little and limited teaching experience	Some (1-3 years) teaching experience in a university	Good (at least 4 years) teaching experience in a university or continuing professional education	Extensive (over 7 years) and wide-ranging teaching experience in a university or continuing	Extensive (over 10 years) and wide-ranging teaching experience in a university or continuing professional

				professional education	education or beyond the university and experience in pedagogical management
<p>2. Development of pedagogical skills / pedagogical training (all aspects mentioned must be evaluated)</p> <p>OR</p> <p>Student or peer feedback on teaching</p>	<p>Only little pedagogical training or only little proof of interest in developing one's teaching skills or only little proof of interest in developing one's teaching skills</p> <p>OR</p> <p>Student feedback collected, no peer feedback</p>	<p>Some pedagogical training (1-4 ECTS credits) or proof of interest in developing one's teaching skills</p> <p>OR</p> <p>Positive student feedback, no peer feedback</p>	<p>Pedagogical studies 5–24 ECTS credits and systematic development of teaching skills begun</p> <p>OR</p> <p>Positive student feedback on several courses over several years. Also peer feedback.</p>	<p>Pedagogical studies 25 ECTS credits and active participation in pedagogical training and other events related to the development of teaching skills and proof of active development of teaching skills</p> <p>OR</p> <p>Excellent student feedback on different courses over a number of years. Positive peer feedback. Pedagogical studies 5–25 ECTS credits</p>	<p>Extensive pedagogical training (over 25 ECTS credits) and proof of active and goal-oriented development of teaching skills and proof of willingness and the ability to share teaching-related knowledge collaboratively and to support colleagues in the development of teaching skills</p> <p>and</p> <p>Excellent student feedback on different courses over a number of years.</p> <p>Excellent peer feedback</p>
<p>3. Development and updating of teaching, also curriculum work (Documented)</p>	<p>Only little interest in changing or developing one's teaching and only little interest in degree programme development</p>	<p>Some demonstrated interest in learning new teaching methods and/or assessment methods and demonstrated interest in degree programme development</p>	<p>The choice of teaching and assessment methods is based on learning outcomes and participation in degree programme development is consistent with the job description</p>	<p>Learning outcomes, teaching methods and evaluation methods are evaluated and developed systematically and participation in degree programme development is active, constructive and consistent with the job description</p>	<p>In addition to the previous:</p> <p>demonstrated willingness and ability to support other members of the working community in the development of teaching or documented or published results of the development of one's own teaching or demonstrated significant ability to take</p>

					responsibility for degree programme development
4. Production of teaching materials <i>Definition: teaching material is material which is produced to support learning in addition to possible lecture slides</i>	Only little demonstrated interest in producing teaching materials and the production and use of materials consists of conventional use of material available	Some demonstrated interest in producing teaching and study materials	Explicit demonstrated interest in producing teaching and study materials and the teaching materials and their use support learning and the achievement of learning outcomes	Pedagogically sound material produced for study guidance and to support studying and learning and teaching materials are assessed and developed continuously	Pedagogically sound material produced for study guidance and to support studying and learning and teaching materials are assessed and developed continuously and the teaching materials are also used elsewhere (e.g. published as a textbook)
5. Supervision of final theses	Little experience in the supervision of final theses	Some experience in the supervision and examination of final theses	Some experience in the supervision of final theses, incl. the supervision and examination of dissertations	Extensive experience in the supervision and examination of final theses	Extensive experience in the supervision and examination of final theses and experience as a preliminary examiner or opponent
6. Study guidance, supporting and guiding the progress of studies	Little or no demonstrated interest in study guidance	Some demonstrated interest in study guidance	Proof of careful and responsible study guidance as a part of one's own teaching or demonstrated interest in the development of guidance	Proof of active efforts in study guidance beyond one's own teaching duties, e.g. work as a tutor teacher, career guidance	In addition to the previous: proof of the ability to support other members of the working community in study guidance and its development or documentation and publications on one's own study guidance activities, their results and development
7. Quality of teaching <i>Average score of course feedback (on a scale of 1-5)</i>	Course feedback not collected, or its score is below 2	The average score of course feedback is 2.0 or higher	The average score of course feedback is 3.0 or higher	The average score of course feedback is 3.5 or higher	The average score of course feedback is 4.0 or higher or an honourable mention or award for good teaching