Master’s Programme in
Wireless Communication

• 2 year, full time, 120 ECTS credits
• Faculty of Engineering
• Lund Campus
• Application deadline – 15 January 2013
• Programme start – September 2013

Programme overview
The Master’s programme in Wireless Communication is one of the most popular Master’s programmes at Lund University and the most popular wireless communication programme in Sweden. The University has excellent resources in the area of wireless communication, both in terms of state-of-the-art laboratory equipment and of lecturers who are often world leading researchers in the field. We are convinced that research and good education go hand in hand. The experience from research naturally influences the quality and content of the courses and vice versa.

The Wireless Communication programme has a focus on the physical and lower layers of wireless communication. The aim is to give in-depth system knowledge, which in turn requires insights into the various components in a wireless system. In the final semester students undertake a large project for their Master’s thesis.

Programme modules/courses
Compulsory courses: Digital Communication (7.5 ECTS), Radio (7.5 ECTS), Digital Communication – Advanced Course (7.5 ECTS), Radio Systems (7.5 ECTS), Channel Modeling for Wireless Communication (7.5 ECTS), Advanced Telecommunication (7.5 ECTS), Multiple Antenna Systems (7.5 ECTS), Multiple Antenna Systems (7.5 ECTS), Wireless Systems Project (7.5 ECTS), Antenna Technology (7.5 ECTS), Master’s degree project (30 ECTS). Electives (22.5 ECTS in total).

Career prospects
The programme gives a solid grounding for a career in wireless communication, either in industry or in academia. On completion of the programme, students have necessary skills for both research and development, e.g. understanding and developing future wireless systems, developing wireless networks for special applications and understanding and enhancing existing solutions. It is also a perfect start for further studies as a PhD student in the area, as shown by the fact that almost 40 percent of our students have continued towards the PhD degree after graduation.

Both Lund University and the surrounding wireless communications industry have an excellent track record in the field of wireless communication. Lund was the birthplace for Bluetooth technology, Ericsson’s mobile handset industry, important technical contributions to GSM/WCDMA/LTE, and numerous other communications solutions that many people use in their daily lives without even thinking about it. ST-Ericsson and Sony Mobile Communications, world-leading companies in the area of wireless communication, have major research and development sites in Lund. Huawei has a rapidly growing research site in Lund and in Copenhagen, approximately 30 minutes away, RenesasMobile has a major research and development site. A number of small and medium-sized companies with activities in the field are also present in Lund and many of our students start to work for these companies directly after graduation, or even before, as a number of in-house thesis project positions are usually offered. Exclusively for the wireless Master’s students, RenesasMobile in Copenhagen will offer a number of internships during the summer period between year 1 and year 2.

Admission requirements and how to apply
ADMISSION REQUIREMENTS
A BSc in electrical engineering, computer engineering or information technology including courses in probability

What students say
“I decided to study Wireless communication in Lund because I knew that Lund University was a part in the invention and development of Bluetooth communication and so I knew that the programme had to be good.”
Smruti Ranjan Panigrahi from India
theory, signal processing, telecommunication, electromagnetic field theory and circuit theory. Applicants who do not hold the required degree are eligible provided that they can prove that they are registered for the last semester of a programme leading to such a degree. An official document stating that they are likely to be awarded the degree before the start of the Master’s programme must be submitted. The degree certificate has to be presented before the start of the programme. English B (advanced). See www.lunduniversity.lu.se for details on English proficiency levels.

**HOW TO APPLY**

1. Go to www.lunduniversity.lu.se and find the programme. Click on “Apply” and follow the instructions for the online application form on the Swedish national application website.
2. Send your supporting documents (for details on document requirements, see www.universityadmissions.se):
   - Cover sheet
   - Certificates and diplomas from previous studies at an internationally recognised higher education institution (university or university college)
   - Transcripts of completed courses and grades for each semester (including course list)
   - Proof of English language skills
   - Proof that you meet the specific admission requirements
   - Copy of the page in your passport with your personal data and photograph, or some other identification document (EU/EEA citizens may need to send a certified passport copy)
3. Make sure to check the country specific requirements on www.universityadmissions.se before sending your documents.
4. Pay the application fee (when applicable).

**SELECTION CRITERIA/ADDITIONAL INFO**

Selection of students is based on academic qualifications.

**TUITION FEES**

There are no tuition fees for EU/EEA citizens. For non-EU/EEA citizens the tuition fee for this programme is SEK 140 000 per year. For details on tuition fees and scholarships, see www.lunduniversity.lu.se.

**About the Faculty of Engineering**

The Faculty of Engineering at Lund University (LTH) is among the leading engineering faculties in Europe, with more than 7000 undergraduates and 800 postgraduates. Founded in 1961, as an independent institute, it today belongs to Lund University. LTH is one of few complete engineering faculties in Sweden. Besides the traditional engineering programmes we offer architecture, industrial design and fire safety engineering. The research carried out is of high international standard and is world-leading in several areas, such as nano-technology, combusting engineering and mobile communications, water resources, automatic control, laser physics and biotechnology. Thanks to the fact that LTH belongs to a large university, cooperation between different disciplines is stimulated in a unique way. Consequently, LTH is recognised for its cross disciplinary research, e.g. between the medical and technical sciences. LTH has close contact to business life. Ideon, Sweden’s first Research Park, is our neighbour. Moreover, international companies as Alfa Laval, Ericsson, Gambro and Tetra Pak are based in Lund.

**About Lund University**

Lund University seeks to be a world-class university that works to understand, explain and improve our world and the human condition. The University is ranked as one of the top 100 in the world. We tackle complex problems and global challenges and work to ensure that knowledge and innovations benefit society. We provide education and research in engineering, science, law, social sciences, economics and management, medicine, humanities, theology, fine art, music and drama. Our 47 000 students and 6 800 employees are based at our campuses in Lund, Malmö and Helsingborg. The University has a turnover of around EUR 700 million (or USD 900 million), of which two thirds is in research and one third in education.

**CONTACT**

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