

Dear Madam, dear Sir,

The Master of Science programme in Computer Science (MSCS) trains professionals who are highly developed in conceptualization, problem solving and modelling, underpinned by a thorough understanding of the technical and fundamental aspects of computing. After earning their master's degree in computer science (CS) they have all required skills to choose from a wide range of possibilities towards further professional development. Many start working at large companies both inside and outside the IT sector. Others opt for startups whose core activities are in research and development, start their own business, build a research career in CS, or become educators who introduce the next generation into the fascinating world of computing.

The master's thesis together with the internship – both situated in one or more of the knowledge domains in CS – form the final part of the MSCS. They provide the student an opportunity to deepen and get acquainted with the practical applications of CS to socially relevant problems from interdisciplinary scientific research, the industry, the government and/or the public sector.

The MSCS has a compulsory internship at a company that takes at least four weeks, but students usually opt for a six-week internship during the summer period in consultation with the company. When approving an internship, the educational board of the MSCS mainly takes into account the fact that the internship project supports the goals and learning outcomes of the MSCS – and thus contains substantial challenges in software development, algorithm design, artificial intelligence, modelling and simulation and/or data analysis – and that the company has a commitment to qualitatively guide the student throughout the internship. For this reason, the MSCS does not have an open call for internships but prospects companies that may offer internships in line with the requirements of the MSCS.

At the end of the MSCS, students have acquired all core knowledge and skills from the different knowledge domains of CS, and have deepened and specialized in some of these knowledge domains. They are able to approach problems at multiple levels of detail and abstraction, come up with one or more creative solutions that solve those problems, convert their solutions into well-designed and implemented software systems, individually or in teams. They have deep understanding of recurring themes and general principles that have broad application to the field of CS, and seamlessly combine theory and practice. They are able to push forward the boundaries of CS, apply their computational skills in different application domains, and communicate in effective ways that are scientifically sound. By committing to life-long learning they can manage their own career development and advancement and they are willing to give account of their professional decisions and developments at all times.

Prof. Dr. Peter Dawyndt
Internship coordinator (Master of Science in Computer Science)
Campus Sterre, building S9 (WE02)
Krijgslaan 281, B-9000 Ghent, Belgium
email: peter.dawyndt@ugent.be
phone: ++32 9 264 4779