Course Title	Research Project
Course Code	CSC695
Course Type	Elective
Level	Master (2nd Cycle)
Year / Semester	2nd Year / 1st Semester
Teacher's Name	Any faculty member

ECTS	20	Lectures / week	N/A	Laboratories / week	N/A

Course Purpose and Objectives	The aim of the course is the students to: • develop an ability to organize and carry out an extended, independent and novel scientific research work at postgraduate level, employing concepts and methods learned in the program. • To synthesize concepts and methods learned in more than one course, and exhibit awareness of previous work in the area of study. • To gain a deeper knowledge of the subject at hand and to give an insight into the working processes used within a company, other institutions or within a department. • Extend the knowledge and skills developed in the taught components of the courses of the program • Prepare the student for a doctorate program of studies.
Learning Outcomes	Upon succesful completion of this course students should be able to: • Work individually to undertake a major project • Identify real-world problem and formulate it in a rigorous and formal way, utilizing suitable theoretical and technological tools and methods. • Select and use effectively the methods and techniques appropriate for particular cases • Plan and manage their work • Evaluate a proposed solution and prove its worth to the client. • Critically evaluate the project and the proposed solution • Demonstrate an ability to engage in academic and professional communication with others in their field through report and presentation. • Demonstrate professional skills (Communication, presentation, writing and time management).

Prerequisites	CSC650 (or co-requisite)	Co-requisites	None

Course Content	There is no set syllabus.Projects are offered by instructors and students select which project they want (therefore, also selecting supervisor). At the completion of the project, students must present their work to the whole of the department. Students eligible to 'take' the master thesis are those that have satisfied minimum requirements for starting work on the thesis. The project subjects are offered by faculty members (internal or external). Each member brings forward a project (or possibly more if required by student numbers). Usually the subject matters related to the research interests of the faculty or deal with solving a problem and producing a solution (for the department or otherwise). The specific deliverables for each individual's project must be discussed and decided upon in consultation with the academic and industrial supervisors. The roles and responsibilities are outlined below: **Student:** • To plan the project • To carry out the necessary work • To review and evaluate the work done • To prepare and present the project deliverables • To initiate and maintain contact with the academic supervisor **Academic Supervisor:** • To identify a suitable problem • Explain the value of the research • To discuss the mapping of the project onto the course requirements • To discuss the project plan • To discuss and approve the intended deliverables • To suggest starting points for consideration of background research • To discuss the nature of the thesis and comment on early drafts • To provide advice on issues associated with the project such as design, implementation, and proof of concept as appropriate. • To attend any presentation or demonstration of the project.
Teaching Methodology	Face-to-face
Bibliography	Specified by the instructor Howard, K. & Sharp, J.A., THE MANAGEMENT OF A STUDENT RESEARCH PROJECT, Gower Turk, C. & Kirkman, J., EFFECTIVE WRITING: IMPROVING SCIENTIFIC, TECHNICAL AND BUSINESS COMMUNICATION, Chapman & Hall

Assessment	The specific deliverables for each individual's project must be discussed and decided upon in consultation with the academic and industrial supervisors. However, each project must involve deliverables falling into the following general categories:
	• A proposed solution to a real-world problem. • A proof of concept, which demonstrates the validity of the proposed solution. • Clear indication of knowledge of relevant work by others in the field. • The selection and application of appropriate theoretical concepts and methods. • A project thesis of between 12,000 to 16,000 words.
	Projects will be marked in two ways.
	Firstly, according to the following scheme:

	• Project justification including its relationship to the current state of the art
	    • Ability to select and use appropriate methods and techniques
	    • The clarity, coherence and succinctness with which the solution is developed
	    • Novelty. Does the work improve significantly the current state of the art?
	    • Ability to critically review the project and assess its implications for future work in view of the project recommendations and conclusions
	    • Project Management: Ability to plan and control the project

	In addition students are reminded about presentation issues: Is the document format (including spelling) of good quality? Is it well organized into appropriate sections? Is the style of language used appropriate for an academic report?
	<table><tr><td>Project</td><td>100%</td></tr></table>
Language	English