

# MS in Computer Engineering Graduate Program

## Master of Science in Computer Engineering (MS)



he "Master of Science in Computer Engineering" allows student to pursue advanced work in electrical and computer engineering technical interest areas including bioengineering, computer engineering, digital signal processing, electrical energy, electromagnetics, electronic design and applications, microsystems, optics and photonics, systems and controls, and telecommunications.

This program has a comprehensive course curriculum to help students study-their-ways to develop greater technical competence in Computing Hardware and Software, and Computer Networks/Security. It provides convenience and flexibility and allows students to complete their graduate degree entirely via online distance learning.

IICSE University's Master of Science in Computer Engineering aims to help students establish goals and obtain a coherent education, designed to give the student in-depth studies in the field.

#### The Program Structure:

Course Code	MS: First Semester Courses	Credit
CENG 801	Computer Architecture	2
<b>CENG 802</b>	Digital VLSI Design	3
CENG 803	System Design Methods	3
CENG 804	Advanced Algorithms	2
CENG 805	Parallel Programming	2
CENG 806	Operating Systems	3
	TOTAL CREDITS	15
Course Code	MS: Second Semester Courses	Credit
CENG 811	Compiler Principles and Techniques	2
CENG 812	Advanced Compiler	3
CENG 813	Advanced Computer Networks	3
CENG 814	Distributed Operating Systems	2
CENG 815	Wireless Communication Systems	2
CENG 816	Digital Communication Systems	3
	TOTAL CREDITS	15
Course Code	MS: Third Semester Courses	Credit
Course Code CENG 821	MS: Third Semester Courses  Digital Signal Processing	Credit 2
CENG 821	Digital Signal Processing Foundations of Systems Engineering Project Management	2 3 3
CENG 821 CENG 822 CENG 823 CENG 824	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes	2 3 3 2
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis	2 3 3 2 2
CENG 821 CENG 822 CENG 823 CENG 824	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows	2 3 3 2 2 3
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis	2 3 3 2 2 2 3 15
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows	2 3 3 2 2 3
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825 CENG 826	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows TOTAL CREDITS	2 3 3 2 2 2 3 15
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825 CENG 826  Course Code CENG 831 CENG 832	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows  TOTAL CREDITS  MS: Fourth Semester Courses Engineering Decision Support Simulation Fundamentals	2 3 3 2 2 2 3 15 Credit
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825 CENG 826  Course Code CENG 831 CENG 832 CENG 833	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows  TOTAL CREDITS  MS: Fourth Semester Courses  Engineering Decision Support Simulation Fundamentals Development Methodology	2 3 3 2 2 2 3 15 Credit 2 3 3
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825 CENG 826  Course Code CENG 831 CENG 832 CENG 833 CENG 833	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows  TOTAL CREDITS  MS: Fourth Semester Courses Engineering Decision Support Simulation Fundamentals Development Methodology Dynamics of Complex Engineering Systems	2 3 3 2 2 3 15 Credit 2 3 3
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825 CENG 826  CENG 831 CENG 831 CENG 832 CENG 833 CENG 834 CENG 835	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows  TOTAL CREDITS  MS: Fourth Semester Courses Engineering Decision Support Simulation Fundamentals Development Methodology Dynamics of Complex Engineering Systems Survey of Artificial Intelligence	2 3 3 2 2 2 3 15 Credit 2 3 3 2 2
CENG 821 CENG 822 CENG 823 CENG 824 CENG 825 CENG 826  Course Code CENG 831 CENG 832 CENG 833 CENG 833	Digital Signal Processing Foundations of Systems Engineering Project Management Systems Engineering Processes Engineering Risk Analysis Linear Programming and Network Flows  TOTAL CREDITS  MS: Fourth Semester Courses Engineering Decision Support Simulation Fundamentals Development Methodology Dynamics of Complex Engineering Systems	2 3 3 2 2 3 15 Credit 2 3 3

### The thesis

A thesis on a particular topic of your choice (with a Supervisor's approval) will be completed by each student in the last semester. There is considerable scope in the choice of subject areas by the student and the research method employed. Each student is allocated a supervisor who guides them through the thesis. The thesis aims to assimilate the theoretical and practical elements of the academic program of study.

**Duration of program:** A Semester runs for a period of three months. Our "Master's Degree" programs are completed within the period of four semesters (one year). We allow extension in the period of study, in case your courses could not be completed within the stipulated time frame. No additional fee, no extra charge for extension in the period of study.

#### How to apply

Prospective student must complete the Admission Form and pay the processing fee of \$45 USD or its equivalent. The processing fee is refundable if admission is denied.

MS COMPUTER ENGINEERING



**Applications for the program:** 

Applications for this program are made online by going to www.iicseuniversity.org/apply.html

