Doctor of Computer Science (DCS)

Introduction

The Doctor of Computer Science (DCS) is a doctoral level program in Computer Science which emphasizes the Research and Development in state of the art topics in Computer Science. The DCS program offers concentrations in Information System and Computer Science which is designed to be accomplished with 45 SKS including dissertation in 6 (Six) semesters.

Each student will be fully involved with the draws on the faculty's diverse expertise and varied interests to develop high quality research uniquely suited to his or her interests. The program encourages students to gain research experience by working closely with faculty member on a variety of industry projects and on alignment of research roadmaps.

Vision

Become one of the globally recognized researches and development program in Computer Science.

Mission

Mission of Computer Science program is:

1. Improving the welfare of society through word-class high quality education in Information Technology and Systems Information to produce qualified, professional, and competent graduates according to current and future needs of the nation.
2. Creating outstanding leaders for global community that participate in an important role in computer science and technology development that answer the society needs.
3. Improving the quality of life of Indonesians and the international community through contribution in economic and industrial development with continues innovation and improvement based computer science.
4. Conducting professional services through introduction, diffusion, and dissemination of relevant knowledge with an emphasis on application of knowledge to the society.
5. Recognizing and rewarding the most creative and value-adding talents.

Program Objective

The objectives of the Doctor of Computer Science (DCS) program are:

1. To increase the productivity of graduates in Computer Science with international recognition.
2. To equip students with advanced Computer Science knowledge in order to be global leader in related field.
3. To provide students with teaching and research activity in order to achieve quality indicator and objectives of Doctoral Program of Computer Science.

Student Outcomes

At the end of the program doctoral graduates will be able to:

1. Able to produce software development methods using quality measurement that can be implemented in the software industry.
2. Able to provide a breakthrough solutions to the problems of inter and multidisciplinary using innovative discovery and state of the art technology approaches which are measured in terms of the quality of the solution.

3. Able to contribute in Research and Development in Computer Science either as scientific theoretical contribution and product development as well as engineering in computer science through inter and multidisciplinary research that proven and innovative.
4. Able to manage Research independently and teams in inter and multidisciplinary in the scopes of national and international that can be justified, tested, and innovatived
5. Able to contribute in community of Computer Science and Information Systems in initiating solutions of problems of national and global scope using Information Technology and Communication.
6. Able to develop Research Road Map in a specific area either in Computer Science or Information Systems.

Prospective Career of the graduates

The graduates of DCS could take up one or combination of the following roles:

1. As Professional Researchers and lecturer, actively conducting research and publishing their papers in high impact publication such as international journalsand ability to bring their research into teaching class.
2. As ICT Consultants, actively conducting high profile consulting projects with leading companies and producing copyrighted frameworks and or white papers.
3. As Owner of ICT Business Leaders, actively leading research based initiatives and actions in their respective company and becoming agent of change in the improvement and or innovation of ICT industry best practices.

Course Structure

SEMESTER 1

Course Name	SCU
RSCH9012 – Research Methodology	3
PHIL9001 – Philosophy of Science	3
Stream: Information Systems & Technology*	
ISYS9019 – Recent Trends in Information Systems	3
ISYS9020 – Advanced System & Architecture Enterprise	3
ISYS9021 – Advance Knowledge System	3
Stream: Computer Science*	
COMP9018 – Software Metric and Quality	3
COMP9019 – Knowledge and Information Retrieval	3
COMP9020 – Advance Computer Security	3

**) Students have to choose one out of two Streams. Only two subjects that will be admitted from three subjects that offered.*

SEMESTER 2

Course Name	SCU
RSCH9013 – Proposal Dissertation	5
RSCH9014 – Research Colloqium (Seminar)	5
Stream: Information Systems & Technology*	
COMP9021 – Advance Information Technology Governance	3
ISYS9022 – e-Business & e-Goverment	3
Stream: Computer Science*	
COMP9022 – Advance Softcomputing	3
COMP9023 – Multimedia Computation	3

**) Students will select one out of two subjects*

SEMESTER 3

Course Name	SCU
RSCH9015 – Dissertation 1 (Qualification Exam)	2
RSCH9016 – Research Publication 1	2

SEMESTER 4

Course Name	SCU
RSCH9017 – Dissertation 2 (Research and Result Examination)	3
RSCH9018 – Research Publication 2	2

SEMESTER 5

Course Name	SCU
RSCH9019 – Dissertation 3 (Closed Exam)	4
RSCH9020 – Research Publication 3	2

SEMESTER 6

Course Name	SCU
RSCH9021 – Dissertation 3 (Open Exam)	5