

Doctor of Computer Science (DCS)

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 Doctorate Program by combining the state of the art Computer Science Research and Best Practices.

Mission

The mission of Doctor of Computer Science Program is to contribute to the global community through the provision of world-class education by :

1. Improving the quality of life 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 Researchers – Academicians and/or Practitioners with high integrity for global community that participate in an important role in computer science and technology development that answer the society needs.
3. Providing the solution for the particular global problems in the persfpective of Computer Science that imply the 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 Scientific services through introduction, diffusion, and dissemination of relevant knowledge with an emphasis on application of knowledge to the society.
5. Searching and Recognizing the Creative Students and Lecturers in areas of Computer Science and marked them with acknowledgement and appreciation for their outcomes.

Program Objective

The objectives of the 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

After completing the study, graduates are:

1. Able to develop science, knowledge and information technology using trans and multidisciplinary approach in order to develop an innovative and verified works in computer science that has commercialization potency.
2. Able to manage and lead research in computer science with inter and multidisciplinary approach.
3. Able to contribute in computer science field development through various applied research that has implication to enhancing the quality of life.
4. Able to disseminate study result in computer science field through publication in national or international journal and seminar.
5. Able to develop the theory and method in System Development Life Cycle (SDLC), Management and Governance (MAGO), Enterprise Applications (ENAP), or Emerging Technologies (EMTE) domain.
6. Able to create new framework of IT governance and IT government based on available framework.
7. Able to comprehend research methodology to examines the phenomenon of Computer Science to find the fact of the problem for the decision-making process in solving problems based on Information and Communication Technology in order to improve the performance of various types of organizations.

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 journals and 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 Colloquium (Seminar)	5
Stream: Information Systems & Technology*	
COMP9021 – Advance Information Technology Governance	3
ISYS9022 – e-Business & e government	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 – Desertation 1 (Qualification Exam)	2
RSCH9016 – Research Publication 1	2

SEMESTER 4

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

SEMESTER 5

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

SEMESTER 6

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