

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.

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 welfare of society through world-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 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 complete the study, graduate are:

1. Able to produce software development methods by using quality measures that can be applied in the software industry;
2. Able to provide a breakthrough solutions for inter and multidisciplinary issues using innovative inventions and measurable technology approaches in terms of quality solution;

3. Able to contribute in development of computer science in scientific theoretical contributions and product development and engineering in computer science through interdisciplinary and multidisciplinary research that is tested and innovative;
4. Able to conduct research both independently and team in inter and multidisciplinary research in national and international that can be justified, tested, and innovative;
5. Able to contribute in computer science community and Information systems in initiating solutions of national and global issues using technology;
6. Able to develop research road map in a specific area in computer science and 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 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 – Advance 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 – Advanced 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 – Advanced Information Technology Governance | 3 |
| ISYS9022 – e-Business & e-Government | 3 |
| Stream : Computer Science* | |
| COMP9022 – Advanced 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 |