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SWINBURNE
UNIVERSITY OF
TECHNOLOGY

Postgraduate programs in
Network Systems



The convergence of Information Technology and telecommunications is creating a new kind of networking technology based on IP networks and multimedia applications. Networks today are expected to offer multimedia services anywhere and anytime. Within corporations, intranets support the interaction of people and the linking of people to information systems. There is an increasing demand for mobility and people expect seamless access to global networks. IP networking is expected to be everywhere and to offer multimedia services of all types.

Swinburne's network systems programs are intended for new graduates and for experienced graduates who wish to update their skills or change their area of specialisation. They are concerned with the design, management and maintenance of networks in corporations and public networks, or service provision to public and private networks.

Network Systems

Graduate Certificate in Science (Network Systems)

Graduate Diploma in Science (Network Systems)

Master of Science (Network Systems)

Program overview

Swinburne's network systems programs are designed to make students proficient in all aspects of wired and wireless networks and to be conversant with new kinds of networking technology based on IP networks and multimedia applications.

The programs offer high level coverage of networking principles and an appreciation of the emerging issues and technologies in networks. Specific competencies introduce industry certification material from Cisco CNNA, CCNP and Microsoft MCITP. (Please note that certification examinations are not part of this course).

In addition to gaining knowledge across the three professional certification areas (Cisco CNNA, CCNP and Microsoft MCITP), students will have the opportunity to choose a specialisation stream and become an expert in emerging technologies related to security, advanced networking and future networks.

Graduates will be well equipped with the practical and theoretical skills to gain employment as a network specialist.

Location

Hawthorn campus

Program length

Graduate Certificate

Six months full-time or equivalent part-time

Graduate Diploma

One year full-time or equivalent part-time

Master

One and a half years full-time or equivalent part-time

Admission requirements

Applicants normally require a degree or equivalent in engineering, science, information technology, business or commerce with an emphasis on information technology. Advanced standing of up to 50 credit points may be obtained in the Master of Science (Network Systems) for those who have completed a relevant degree or have extensive work experience in the discipline.

Professional recognition

The Master of Science (Network Systems) program has been accredited at the Professional Level with the Australian Computer Society (ACS).

The CNNA, CCNP and MCITP certifications are widely recognised and valued in industry. The course fully prepares you for the CCNA certification exam and partly for the MCITP and CCNP.

In the Advanced Networking stream the MCITP and CCNP are also fully covered.

Program structure

All units of study are valued at 12.5 credit points unless otherwise stated. Subject to the approval of the course coordinator, students may replace units with a research report (valued at 12.5 credit points) and/or a research paper (valued at 25 credit points).

Graduate Certificate

In order to gain the graduate certificate students must successfully complete four units of study to the value of 50 credit points. Students must undertake at least three core units and one elective.

Graduate Diploma

In order to gain the graduate diploma students must successfully complete eight units of study to the value of 100 credit points. Students must undertake at least six core units and two electives.

Master

In order to gain the master students must successfully complete 12 units of study to the value of 150 credit points. Students must undertake eight core units and four electives.

Units of study

Core units

HET706 Networks and Routing *
HET708 Internetworking Technologies *
HET710 Network Administration (Microsoft 1)
HET715 Network Computing
HET755 Introduction to Network Programming
HIT7702 Enterprise Network Server Administration (Microsoft 2) # OR
HIT7703 Enterprise Services and Security (Microsoft 3) #
HIT8044 Professional Issues in Information Technology
HIT8071 Professional Project OR
HIT9326 Internship Project

Non-core units for each stream

Advanced Networking stream

HET713 Internetworking Routing +
HET714 Internetworking Switching +
HET753 Secure Remote Access Networks +
HIT8716 Converged Networks +

Security stream

HIT7703 Enterprise Services and Security (Microsoft 3) #
HIT7720 Secure Networks
HIT7717 Advanced Security
One Elective unit

Future Networks stream

HET718 Mobile and Personal Networking
HET729 Design and Management of Networks OR
HET736 Broadband Multimedia Networks
HIT7720 Secure Networks
One Elective Unit

Elective units

HET713 Internetworking Routing +
HET714 Internetworking Switching +
HET717 Simulation of Networks
HET724 Research Paper **
HET725 Research Report **
HET729 Design and Management of Networks
HET736 Broadband Multimedia Networks

HET753 Secure Remote Access Networks +
HET758 Networking and Online Games
HIT6323 Web Programming
HIT7702 Enterprise Network Server Administration (Microsoft 2) #
HIT7703 Enterprise Services and Security (Microsoft 3) #
HIT7720 Secure Networks
HIT8163 Unix for Telecommunications
HIT8716 Converged Networks +
HIT9010 Research Methods **

* Prepares students for CCNA (Cisco Certified Network Associate) Qualification

Prepares students for four core units of MCITP (Microsoft Certified Technology Specialist: Server Administrator) Qualification

+ Prepares students for the first stages of CCNP (Cisco Certified Network Professional) Qualification.

** Research and development projects are available only for approved project proposals. Approval is decided on a case-by-case basis by the Course Panel.

Nigel Callanan, Solutions Architect / Systems Engineer

“Working as a consultant with a global IT company, I was surrounded by highly qualified people and it was clear that I needed further study to progress. I chose the Master of Science (Network Systems) not only because it related to my work, but because it gave me the flexibility to incorporate a research component and deepen my knowledge in a specific area of interest. I was very happy with the results, and at the completion of this course obtained a promotion to a regional position.”

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FE0/1

FE0/0

FE0/1

R12

R13

FE0/0

FE0/1

FE0/0

FE0/1

Network Systems

General information

Facilities

As a Swinburne student you will automatically gain access to a range of facilities to assist your studies. These include a well-resourced library and computer laboratories. There is also a sports association with fitness and health facilities on campus, plus a wide range of clubs to join.

Other services available include personal counselling, health services, careers counselling, housing, employment and financial advice.

Fees for local students

In 2009, tuition fees for this program are based on \$1,900 per 12.5 credit point unit of study. In the event that a unit of study is derived from another program, the applicable fee will be that of the other program. All fees are reviewed each year and may increase without notice.

FEE-HELP is a government funded loan that helps eligible fee paying students pay their tuition fees. FEE-HELP is not available to New Zealand citizens and most holders of Australian permanent visas, however is available to Australian citizens and holders of a permanent humanitarian visa.

For further information visit: www.goingtouni.gov.au

Application procedure

Entry is possible in both Semester 1 (February) and Semester 2 (July).

Application forms can be obtained by phoning 1300 368 777 or can be downloaded from the web at:
www.swinburne.edu.au/postgrad

Applications must be accompanied by a certified copy of original transcripts of official results and a curriculum vitae.

For the next round of closing dates visit:
www.swinburne.edu.au/postgrad

International students

If you want to study at Swinburne but are not an Australian resident, telephone Swinburne International on (+61 3) 8676 7002 or 1800 897 973 from within Australia, or visit: www.swinburne.edu.au/international

Further information

Telephone: 1300 368 777

Email: postgrad@swinburne.edu.au

Website: www.swinburne.edu.au/ict

ANY QUESTIONS?

www.swinburne.edu.au

1300 ASK SWIN (1300 275 794)

postgrad@swin.edu.au

Postgraduate Information Day

Swinburne Hawthorn campus

October 2009

www.swinburne.edu.au/postgrad

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