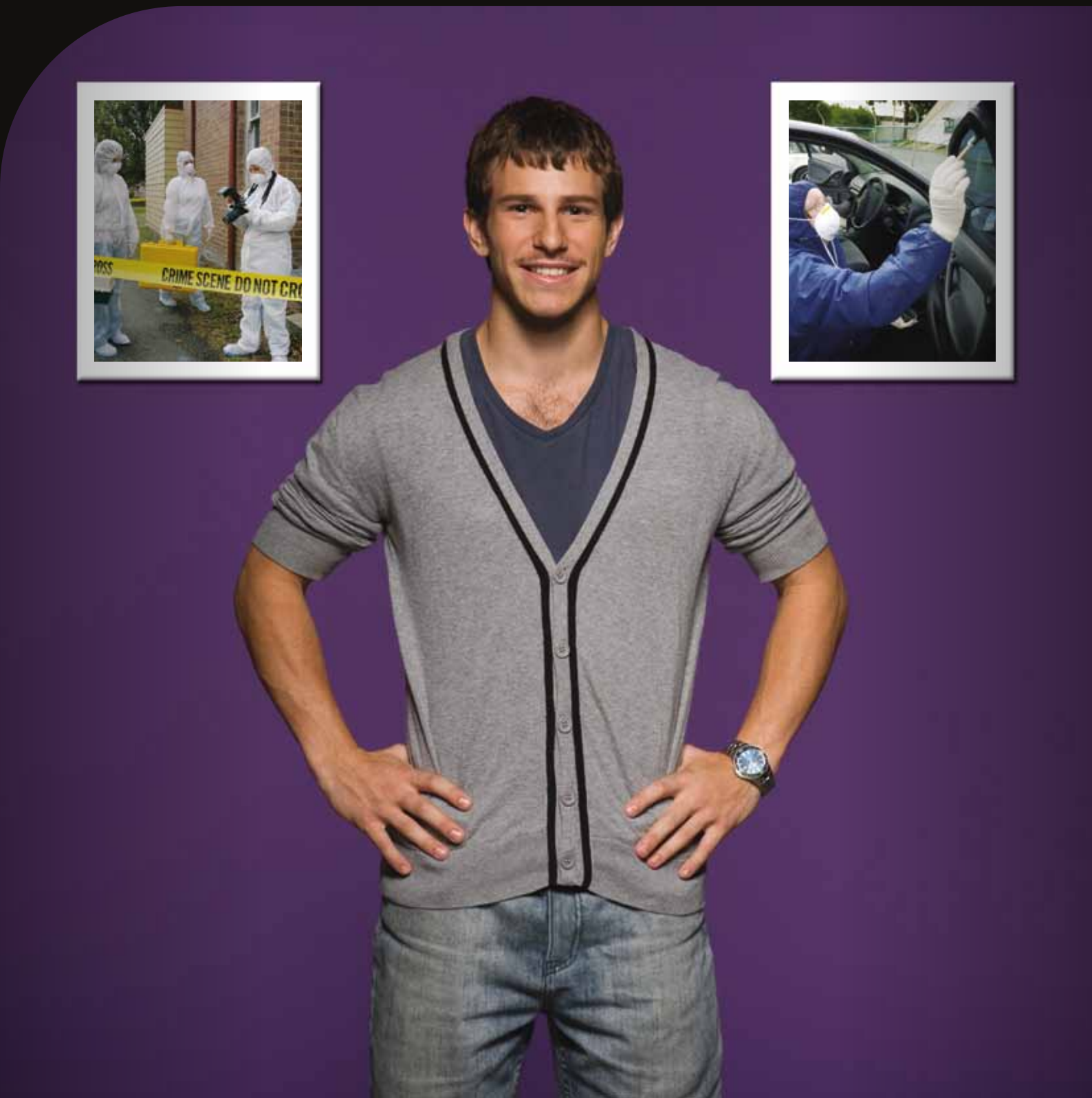
DEGREES OF SUCCESS

University of Western Sydney
Bringing knowledge to life

AREA OF STUDY GUIDE 2012

FORENSICS



The University of Western Sydney (UWS) provides a welcoming environment for all students, and our campuses, spread across Greater Western Sydney, offer purpose-built facilities designed to give you room to think and learn.

With ground-breaking research, recognised nationally and internationally, our academics are challenging the boundaries of knowledge and laying the pathway to success through teaching and learning excellence.

At UWS you are encouraged to aspire to achieve great things in your career and community.

FORENSICS COURSE GUIDE 2012

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3/5/2011 STR2385

Mitchell Gibbs

Bachelor of Science (Forensic Science)

Mitchell believes everybody has the same potential to make a difference and be successful in life. 'It is just how you use your potential which determines whether you will achieve more than someone else,' he says.

Ever since he was six or seven, Mitchell has been interested in Forensic Science. He chose to study Forensic Science at UWS because 'it has a fantastic forensic science department and degree. It was also located near where I lived and I received a great scholarship to help with costs.'

His advice for prospective students wishing to pursue studies in Forensic Science is to 'get what you can out of the course and always do the best you can.'

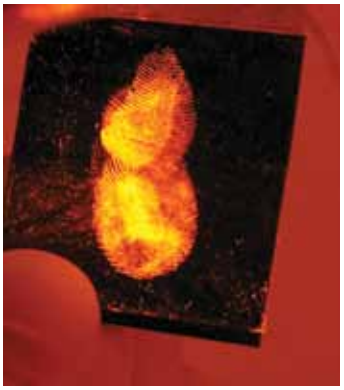
'Get what you can out of the course and always do the best you can.'

'A lot of getting anywhere in life is just by who you know. The networks you are involved with. My brother met someone from the NSW Police Force who was interested to know that he had a brother studying Forensic Science.

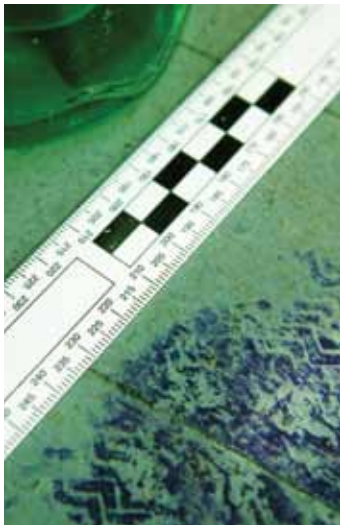
'As a result I contacted the person, who worked hard to provide an opportunity for me to work with the police. He also contacted the University to arrange it with them.

'I am now working with a small team, known as SLR, which works both on the crime scene and in the lab. I will be helping in recovering evidence. My advice is to use the contacts you make to help you along the way.'

Why Study Forensics



» Prepare for a dynamic, exciting and challenging career: The UWS forensics programs open up a wealth of career choices, from criminology to computer forensics. Graduates can pursue careers as crime scene investigators, criminalists, accident investigators, drug analysts, forensic exhibits officers and environmental investigators. The forensic science course also equips graduates for roles in border security, workplace accident investigation, fire investigation, customs and environmental investigation, as well as roles in government laboratories undertaking DNA and drug analysis.



» Hone your eye for detail in real-world settings: Success or failure in forensics depends on your ability to piece together the little things – the fingerprint, the strand of hair, the snag of clothing – that can lead to big breakthroughs that solve cases. With its highly respected staff, courses, and chillingly realistic Crime Scene House, UWS has set new frontiers for forensics and explores the vast expanses of this vital science.

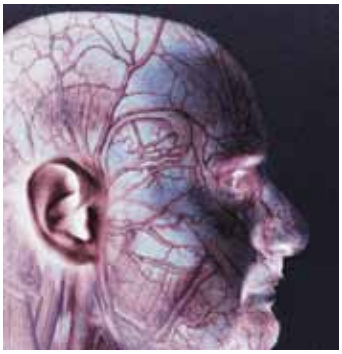
» Be ready to hit the ground running: With a balance of theory and practical field studies, industry-based projects, placements, and local and international work experience opportunities, this professionally recognised program will equip you with the skills you need to have a successful career in forensic science.

» UWS's Crime Scene House: The Crime Scene House enables the Bachelor of Science (Forensic Science) students to practise realistic crime scene investigations. Dressed in special crime scene suits, you will gain an understanding of critical aspects of forensic investigation by processing crime scenes, including evidence collection and integrity, fingerprinting, footwear impression evidence, blood stain pattern interpretation, DNA collection, drug sampling, tool mark evidence, scene sketching and crime scene photography.

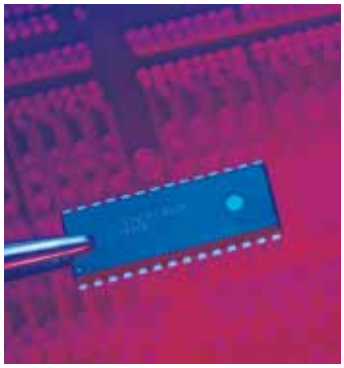
at UWS?

» Graduate success: With changes in forensic science and law enforcement, it's no longer necessary to become a sworn police officer to work in roles such as crime scene investigation and criminalistics. Students who have completed the UWS forensic science program have been employed directly into forensic laboratories by agencies such as the NSW Police Force and Australian Federal Police.

» Experienced teaching staff: Our academic staff have extensive forensic backgrounds from a variety of fields, including the NSW Department of Corrective Services, the NSW Police Force, and the Australian Federal Police. Their passion and knowledge will inspire you to master the necessary disciplines and develop your own career.



» Learn from industry specialists: Glenn Porter, who heads the Bachelor of Science (Forensic Science) course, teaches specialised units such as Forensic Photography, Crime Scene Investigation and Complex Forensic Case Studies. He has almost 20 years experience as a forensic practitioner, and before becoming an academic at UWS, he was a forensic photographer with the Australian Federal Police.



» New frontiers in research: UWS research centres and programs attract international, national and local interest. Our reputation for research excellence has placed us in the Australian Research Council's (ARC) funding top 20, underlining our position among the best research institutions in the country. We are committed to developing future generations of researchers through training programs for postgraduate research students, postdoctoral fellows, and early career researchers.

Bachelor of Science (Forensic Science)

The UWS Bachelor of Science (Forensic Science) degree, with its very own Crime Scene House, is a comprehensive undergraduate science degree that offers a hands-on introduction to collecting evidence and conducting investigations – ensuring graduates are well prepared for the real-life equivalent. A number of recent students now work as Scene of Crime Officers for the NSW Police Force.

Course	UAC Code	Campus	Duration	ATAR
B Science (Forensic Science)	723000	Hawkesbury	3F	80.35

Practical Experience

The Crime Scene House at the Hawkesbury campus enables you to practise realistic crime scene investigation. You will gain an understanding of critical aspects of forensic investigation by processing crime scenes, including evidence collection and integrity, fingerprinting, footwear impression evidence, blood stain pattern interpretation, DNA collection, drug sampling, tool mark evidence, scene sketching and crime scene photography.

A range of forensic case studies provides you with access to physical evidence exhibits, and introduces you to the realities of a forensic science case. You will develop professional skills and practices, including evidence handling and integrity, using an evidence exhibit registry, case file management and preparation, accreditation requirements, court presentation, using contemporaneous notes, report writing, and writing police/expert statements.

Key: B = Bachelor of; F = Full-time.

Criminalistics (the practical application of forensic investigation) often adopts more novel scientific practices and provides valuable linkage evidence to forensic cases. You will engage in a range of criminalistic topics including forensic photography, hair and fibre comparison, footwear and tyre impression evidence, fingerprinting, blood spatter interpretation, tool mark examination, biological evidence, drug identification, DNA analysis, explosive residues, GSR (Gun Shot Residue), and buried evidence.

The practical aspects of the Crime Scene House are blended with solid theory, balancing and integrating both laboratory and field-based work. You will benefit from a range of learning strategies, including theoretical concepts associated with science, forensic science, law and criminology – all under the guidance of our academic staff, whose lengthy forensic backgrounds offer reassuring real-world experience. What's more, the course is supported by an External Advisory Committee consisting of leading forensic science practitioners, including state and federal law enforcement agencies and forensic laboratories.

Places within the Bachelor of Science (Forensic Science) are limited and highly competitive, so students interested in this area of study may, as an alternative, complete a major in Forensic Science within the Bachelor of Science.

Further Studies

An Honours year is available to high-achieving students. Information and details on how to apply for Honours will be provided to you as you progress through your Bachelor degree, or you can find out more at myfuture.uws.edu.au/honours

Core Subjects and Electives

To graduate with a Bachelor of Science (Forensic Science), you will be required to complete 24 subjects (units). Core subjects may include Biology, Chemistry, Digital Forensic Photography, Forensic Science, Forensic and Environmental Analysis, Crime Scene Investigation, Molecular Biology and Toxicology.

There are six elective subjects and the course structure allows you to broaden your studies in four distinct science discipline areas including Biology, Chemistry, Criminalistics and Microbiology.

Indigenous Australian Studies

Enrolment in the Indigenous Australian Studies (IAS) major, sub-major or units is available to all UWS undergraduate students who have open electives. Find out more at studyias.com.au

For detailed information about the course structure and subjects, visit myfuture.uws.edu.au

Career Opportunities

As a graduate of the UWS Forensic Science degree, you will be well equipped to work within a range of forensic and other scientific disciplines for employers such as:

- Australian Federal Police (AFP), NSW Police, and all other state and territory police services
- Customs
- Environmental Protection Authority (EPA)
- WorkCover
- Australian Quarantine and Inspection Service (AQIS)
- State and federal health departments
- Government analytical chemical laboratories.

Career options include forensic scientist, crime scene investigator, private investigator, forensic consultant, ranger, drug analyst, environmental investigator, police officer, drug testers in human and animal sports, forensic researchers and academics.

Because of the wide skill base offered in this degree, graduates can also work in analytical chemistry and microbiology laboratories, quality control and assurance, biochemistry and molecular biology, scientific research, education, and the chemical industry.

Jodie Green

Bachelor of Science (Forensic Science) University Medal winner

For Jodie Green the best aspect of studying Forensics at UWS is the dedicated staff and the close-knit learning community at the Hawkesbury Campus.

'The program of study is a constant challenge, building my skills in science, photography and research to name a few,' she says. 'But for those willing to make a conscious effort to reach their full potential, the friendly staff are there to encourage, guide and support you. It's great to pass a former lecturer in the corridor and be greeted by name and a friendly smile, even two years after completing their class,' she says.

'The friendly staff are there to encourage, guide and support you.'

'The University of Western Sydney was my first choice for two reasons: the program offered a larger practical field-based component and the home campus for Forensic Science, Hawkesbury, is located in a scenic area offering a relaxed learning environment.' As a result of her studies at UWS, Jodie was awarded the University Medal and presented her research at the Australian and New Zealand Forensic Science Society (ANZFSS) International Symposium on the Forensic Sciences and the 2010 Biometrics Institute Australia Conference.

'In addition, my achievements in my studies have assisted me in securing a position with the Australian Federal Police, Forensic and Data Centres, Canberra. I have also been elected as a committee member of the ANZFSS ACT Branch.' Jodie's advice to new students in Forensics is simple yet profound. 'Dedication and perseverance will ensure your success!'

Bachelor of Computer Science (Computer Forensics)

Recent advances in computer technology have enhanced the operations of business and community organisations around the world. Unfortunately, they have also opened countless doors for criminals: every day a complex new cyber-crime is concocted.

Course	UAC Code	Campus	Duration	ATAR
B Computer Science (Computer Forensics) (Advanced)	724000	Penrith	3F	90.35
B Computer Science (Computer Forensics)	724004	Penrith	3F	76.85
Professional Recognition				
The Australian Computer Society (ACS) recognises graduates of this course at the professional level.				

Key: B = Bachelor of; F = Full-time.

Law enforcement authorities now face unprecedented technological challenges, placing computer forensics experts at the forefront of the war against crime.

Focusing on digital evidence from computers and computer networks, computer forensics specialists analyse browsers, firewalls, and operating systems in search of suspicious or incriminating files or traces of previous activity. This requires both an exhaustive knowledge of hardware and operating systems, and the subtlety to break through file encryptions without corrupting the evidence. UWS equips you with these skills.

Our Computer Forensics major offers a variety of options, enabling you to:

- identify likely sources of digital evidence at various levels, including: hardware; the operating system; system and application programs; and the network
- preserve original data sources through non-altering copying techniques
- extract and interpret data from system log files and caches, such as those associated with web and email servers and clients, proxy servers, and firewalls
- search for, identify, recover, and decrypt data hidden or obfuscated in computer file systems
- configure system security and "trip wire" facilities to support subsequent intrusion and activity investigations
- use "off the shelf" forensic software tools typical of those used in the industry
- document and present digital evidence as a member of a multi-disciplinary team.

If you choose the Computer Science (Advanced) program, you will be entering an elite degree aimed at transforming today's brightest computing minds into tomorrow's computing leaders. Throughout the degree you will be mentored and guided by leading computing academics and develop superior knowledge and confidence so you will graduate a step ahead in your career.

Further Studies

An additional Honours year is available for high-achieving students. The application and proposal need to be provided to the relevant academic in the final year of your Bachelor degree. Information about Honours options will be provided to you as you progress through your Bachelor degree, or you can find out more at myfuture.uws.edu.au/honours

Core Subjects and Electives

To graduate with a Bachelor of Computer Science, majoring in Computer Forensics, you will be required to complete 24 subjects (units).

The core subjects you may study in this degree include Programming Fundamentals, Data Structures and Algorithms, Computer Networks and Internets, Computer Security, Systems Administration Programming and Information Systems Ethics and Law.

There are four elective subjects within the Bachelor of Computer Science (Computer Forensics). Electives may be chosen from other courses offered by the University of Western Sydney.

To graduate with a Bachelor of Computer Science (Advanced), majoring in Computer Forensics, subject options are similar to the above. You will be required to complete Advanced Computer Science activities throughout the degree.

Indigenous Australian Studies

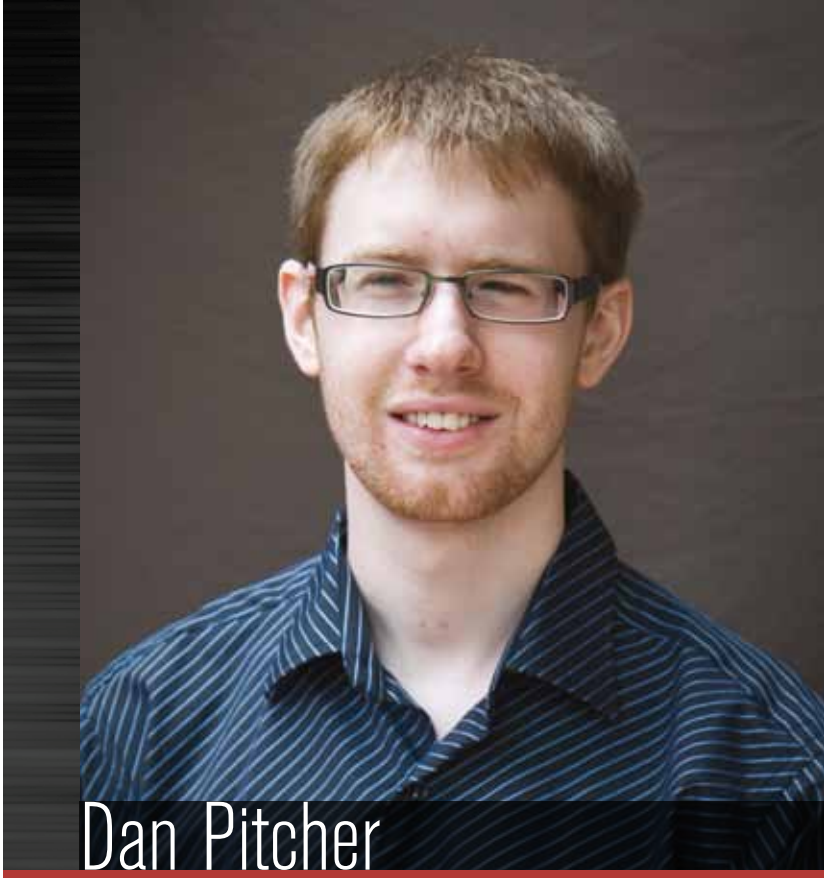
Enrolment in the Indigenous Australian Studies (IAS) major, sub-major or units is available to all UWS undergraduate students who have open electives. Find out more at studyias.com.au

For detailed information about the course structure and subjects, visit myfuture.uws.edu.au

Career Opportunities

Computer forensics is a rapidly growing industry, with very rewarding career options, including roles with:

- law enforcement agencies
- security consulting firms
- research facilities to develop new weapons against online crime.



Dan Pitcher

Bachelor of Computer Science (Computer Forensics)

Dan Pitcher believes an enquiring mind is a prerequisite to studying computer forensics. ‘Ask questions about everything,’ he says. ‘I would also recommend students research on the internet. There are plenty of knowledge bases out there regarding computer forensics.’

‘Ask questions about everything.’

Dan chose to study Computer Forensics at UWS because the University offered the ability to do work in computer forensics. ‘Most other nearby universities did not,’ he says.

At UWS Dan has appreciated the hands-on experience with industry-level tools and programs. ‘I also had the opportunity for professional experience and development during my final year.’

Providing Support Through Scholarships

The University of Western Sydney is not only about obtaining an education. We challenge ourselves to engage students who will get involved and make a difference to the University and wider communities.

UWS has a unique set of scholarships on offer with many differing criteria. They reflect our strong commitment to academic excellence and opportunity for Greater Western Sydney students. Our scholarships support students who have diverse interests and skills, and who can and do make an active contribution.

UWS works closely with business, industry and the community to ensure we offer scholarships that meet the needs of our students. Our scholarships provide our students with support and give them the opportunity to establish professional relationships while they study.

Take the time to examine our scholarships and make the most of your opportunities for success. For details on UWS Scholarships, including the eligibility requirements and how to apply, refer to www.uws.edu.au/scholarships or call 1300 897 669.

Robert Ebeyan

Currently studying a Bachelor of Science (Forensic Science)

Aspire Future Leader

Robert sees being a part of the Aspire Future Leaders program as having benefits to both the University and himself. 'We can help out UWS, and it is helping us develop our futures.'

He looks forward to representing UWS in the community and is eager to help out wherever he is needed, whether it be visiting schools to talk about university life, or working at charity events and fundraisers.

Through Aspire he hopes to learn better oratory and presentation skills, and hopes that his sense of humour and teamwork skills will be valuable assets to the program.

Robert is a UWS scholarship recipient. He says the scholarship has taken the pressure off his study, and adds that his 'university experience would have been completely different without it.' Robert believes he received the scholarship as he is in an 'up and coming field, where students are supported because we're going to be in such demand when we graduate.'

Aspiring Leaders

Aspire Future Leaders at the University of Western Sydney™ is a unique professional development and personal enrichment program that has been specifically designed to cultivate and enhance the leadership qualities of students.

By being a part of Aspire, you will have the opportunity to be involved in:

- the annual three-day Aspire Welcome Retreat
- professional and personal development workshops
- valuable networking opportunities with the professional community
- VIP Invitations to UWS Open Days and other annual events
- volunteering opportunities through community engagement
- internships and work experience opportunities.

Aspire is an opportunity for young, talented people with leadership abilities and ambitions, to become part of an elite group of high-achieving undergraduate students. For details on the Aspire program and eligibility requirements, please refer to serious.uws.edu.au or call 1300 897 669.

Applicant Checklist

Find out about our courses 1

- ❑ Read the information within this Guide
- ❑ Talk with Careers Advisors, your parents and teachers/mentors
- ❑ Refer to the Future Students site, visit myfuture.uws.edu.au

Talk to us 2

- ❑ Attend UWS events – find out more at myfuture.uws.edu.au/events
- ❑ Call the UWS Course Information Centre on 1300 897 669 or email study@uws.edu.au
- ❑ Get the inside information on Alternative Entry Pathways to UWS, Triple Advantage and bonus points, Scholarships and Aspire

Apply to UWS 3

- ❑ Apply through UAC, visit www.uac.edu.au
- ❑ Place your UWS Preferences
- ❑ Check your eligibility and submit a scholarship application, visit www.uws.edu.au/scholarships

For International Students

If you are an international student completing one of the following qualifications in 2011, you must apply through UAC International:

- » an Australian Year 12 in or outside Australia
- » an International Baccalaureate
- » a New Zealand National Certificate of Educational Achievement (NCEA) Level 3

All other international students must apply direct to the University of Western Sydney. UWS International application forms, 2012 International tuition fees and further information about studying in Australia can be found at www.uws.edu.au/international

If you have any questions about applying as an international student call 02 9852 5499 or email internationalstudy@uws.edu.au

For international students, you can lodge your international student application online at www.uac.edu.au/international

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www.uws.edu.au

Course Information Centre
1300 897 669
study@uws.edu.au

See you at

- UWS Day Campbelltown, 7 June 2011
- Parent Information Evening, 7 & 14 July 2011
- UWS Open Day, 28 August 2011
- UWS Campus Tours, October 2011
- UWS Day Penrith, 9 November 2011
- Course Decision Day, 3 January 2012

More information: myfuture.uws.edu.au/events

Interact with us to experience UWS Life

- Visit the Future Students Site: myfuture.uws.edu.au
- Visit the Events Mini-Site: myfuture.uws.edu.au/events
- Find us on Facebook: www.uws.edu.au/facebook
- Connect with us on Twitter: www.twitter.com/UWSNews
- Take a Virtual Tour: virtualevents.uws.edu.au
- Watch our YouTube videos: www.uws.edu.au/youtube
- Call the Course Information Centre: 1300 897 669
- Email the Course Information Centre: study@uws.edu.au