BACHELOR OF SOFTWARE ENGINEERING (HONS)
DISCIPLINE ELECTIVE PATHWAYS - CALLAGHAN

THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

These pathways have been created to provide guidance for Bachelor of Software Engineering (Hons) students wishing to specialise in a second discipline area with their elective courses.

Each pathway has been selected to complement the content of the Bachelor of Software Engineering (Hons) program with consideration of pre-requisites. Please note that these pathways are suggestions only and will not be noted formally on the final degree certificate.

Students are welcome to enrol in any elective provided that they satisfy the pre-requisites, and they adhere to the rules regarding maximum number of 1000 level courses in their program. For a full list of UON courses, visit the course handbook.

STUDY AREAS AVAILABLE

- Animation
- Criminology
- UX & Interaction Design
- ICT in Education
- ICT Trainer
- Data Analytics
- Data Mining

Recommended Electives for Software Engineering (Hons) Program

Animation

Complete the following:

DESN1801	**Animation Thinking**
DESN2801	**Animation Process**
DESN2802	**Animation Production**
DESN3801	**Animation Studio**

ICT Trainer

Complete the following:

EDUC6036	**Education Leadership and ICT**
EDUC6117	**Building High-Quality Learning Environments**
EDUC6351	**Data Mining for School Leaders**
EDUC6353	**Leading and Managing Education Change**

Criminology

Complete the following:

CRIM1010	**Introduction to Criminology**
CRIM1020	**Victimology**
CRIM2001	**Criminal Justice in Practice**
CRIM3040	**Forensic Evidence**

Data Analytics

Complete the following:

STAT1100	**Data Wrangling and Visualisation**
STAT2020	**Predictive Analytics**
STAT2110	**Engineering Statistics**
STAT3100	*Leading and Managing Education Change*
or	
STAT3800	*Deterministic and Stochastic Optimisation*

UX & Interaction Design

Complete the following:

DESN1600	**Interaction and UX Design Fundamentals**
DESN2600	**Designing for Game Play**
DESN2610	**Experience Design Studio**
DESN3600	**Experimental Interfaces and Tangible Interaction Design**

Data Mining

Complete the following:

STAT1100	**Data Wrangling and Visualisation**
STST2110	**Engineering Statistics**
INFT2060	**Applied Artificial Intelligence**
COMP3340	**Data Mining**

ICT in Education

Complete the following:

EDUC1038	**Foundations of Secondary Education**
EDUC1103	**Schooling, Identity and Society**
EDUC2102	**Education Psychology: Learners and the Leaning Process**
EDUC2200	**The Future of Teaching and Learning**