Advanced Technology Unit

The St Patrick’s Technical College Advanced Technology Unit (ATU) provides students with the opportunity to advance their education for the critical employment areas of Advanced Manufacturing, Energy and Defence related industries.

Students in these programs combine general education subjects that provide solid foundation knowledge with practical, applied educational programs established through partnerships with the community, industry and other academic institutions. ATU programs provide the opportunity for students to be extended in a more academic and challenging curriculum.

Students undertaking an ATU course at St Patrick’s Technical College are eligible for an Australian Tertiary Admission Rank (ATAR) allowing them to pursue a university pathway.

Applied Engineering course outline

This two year program introduces students to the scope, rigor and discipline of engineering by teaching traditional SACE subjects, such as Mathematics and Physics, with a significant focus on practical applications.

Students not intending to pursue a tertiary education pathway will benefit greatly from the knowledge and logical thought processes that result from taking the subjects offered in the Applied Engineering course.

Some students who participate in this course will have already made the decision to enter the trades as an apprentice, but by participating in this program they will develop knowledge and skills to support them in further studies after or during their apprenticeship.

Course structure

Students study a unique SACE course developed at St Patrick’s Technical College for the Advanced Technology Unit, and undertake pre-vocational training from our Electrotechnology and/or Metals & Engineering programs.

All theory subjects are tailored specifically for the course being undertaken while practical subjects are industry relevant and highly experiential.

Theory subjects

- Mathematical Studies
- English Pathways
- Physics
- Scientific Studies

Practical subjects

- Technical Graphics
- Systems & Control Products
- Scalextric Eco Challenge

Pre-vocational training

- Certificate II in Engineering; and/or
- Certificate II in Electrotechnology

A full list of the competencies delivered in this course is available from the College website.

All pre-vocational programs at St Patrick’s are delivered under an exclusive cooperative agreement with TAFE SA.

Participants in this course will undertake a major project in their second year that combines the Engineering and Electrotechnology pre-vocational skill sets of students.

Workplace Practices

Workplace Practices gives students the skills necessary to work effectively in teams and allows them to gain a detailed understanding of their chosen trade.

Career planning, research, employability, self-evaluation and goal setting skills are extensively covered in this subject. The program includes:

- Skills for Life

Work Experience is an integral part of the College’s Workplace Practices program. It provides an opportunity for students to:

- experience their potential career first hand;
- develop skills for the workplace; and
- gain feedback from employers about their general employability skills.

It is also a great way to impress potential employers!

Career pathways

St Patrick’s is the designated curriculum focus school in the South Australian Advanced Technology Industry – School Pathways Program, funded by the Australian Government.

The Applied Engineering course has been developed to compliment and support this program and as such, prepares students for career pathways in the Advanced Manufacturing, Energy and Defence industry sectors.

The Applied Engineering course structure allows students to be awarded an ATAR if they wish to follow a higher education pathway.

2014 Enrolment information

Enrolments are now open for 2014. Places for our most popular courses fill quickly, therefore your early enquiry is encouraged.

Call or visit us online to arrange for an enrolment package to be sent to you.