1. INNOVATION AND ENTERPRISE ACADEMY

5.1 INTRODUCTION TO THIS ACADEMY

The Innovation and Enterprise Academy offers a wide variety of courses and learning opportunities. Within the Innovation and Enterprise Academy the following courses are offered:

- Design and Graphics T/A
- Fashion, Design and Textiles T/A
- Food for Life A
- Furniture Construction A/V
- Hospitality A/V
- Information Technology T/A/V
- Metal Technology A
- Tourism and Event Management A/V

The majority of courses in the Innovation and Enterprise Academy are practical in nature with a strong emphasis on vocational education, allowing students to develop the knowledge and skills to pursue a wide variety of career pathways. Additionally, they develop valuable skills for life-long leisure interests and independent living.

Those students wishing to complete a tertiary major or minor can enrol in the following tertiary accredited courses:

- Design and Graphics T/A
- Fashion, Design and Textiles T/A
- Information Technology T/A/V

The Innovation and Enterprise Academy area has excellent facilities, which include a fully operational training restaurant, commercial kitchen and coffee shop, modern and well-equipped wood and metal workshops and modern IT and Computer Aided Drawing and Design (CADD) labs.

5.2 COURSES

5.2.1 DESIGN AND GRAPHICS (T/A)

Curious how the world works? Interested in how objects and buildings are made? Inventiveness is your middle name? Then the Design and Graphics course is for you!

Through the three streams of CADD, Architecture and Graphic Design we delve into how each of these subjects positively shapes the world around us. Students develop and use lateral thinking, model conceptualisation and problem-solving skills to design innovative products, buildings, spaces and graphic art. Students learn to communicate design responses to real client briefs using subject-specific technology and techniques. Mentoring by industry professionals and site visits complement classroom content.

The course structure is the same for both the tertiary and accredited courses but the projects, assignments, and tests for the accredited course are less academically demanding.

Design and Graphics offers a number of study pathways over the two-year program. Students have the opportunity to study how problems are solved and communicated in three different streams in the Design and Graphics course.

- Computer Aided Drawing and Design (CADD)
- Graphic Design
- Architecture

DESIGN AND GRAPHIC COMMUNICATION UNITS WILL BE OFFERED IN THE FOLLOWING SEQUENCES;
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<th>2014 Semester 1</th>
<th>2014 Semester 2</th>
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Students who are interested in more than one stream, such as CADD and Architecture are able to select units from more than one pathway to complete a Major Minor or Double Major in this course.

**Unit Descriptions**

**Computer Aided Drawing and Design (CADD) T/A**

Students develop skills and knowledge in the use of computer software to design, produce, annotate, print and plot drawings to industry standards. In this introductory unit, no prior knowledge is required. Students who have previously studied technology related subjects are encouraged to extend themselves in challenging design briefs using computer software. Excursions to view CADD in industry introduce students to real world applications. At the conclusion of the three units, an industry standard portfolio has been created. As a final project students manufacture and finish a CAD CAM model.

Covered in this course:

- 3D computer modelling
- Animation of objects
- Design process
- Computer Aided Manufacture (CAM)
- Hand drawing standards
- Materials and their properties
- 3D printing

**Graphic Design T/A**

In this introductory unit, students explore the design process to develop products for print and screen ready for the market. Students address design problems by focusing on graphical problem solving and investigating visual language concepts. Drawings and 3D models are created both by hand and through the use of Adobe CS5 Suite including Photoshop, Illustrator and InDesign. Rigorous theory in the evolution of Graphic Design through art and design history provides a focus direction for the logo development project.

Students in the third semester unit focus on type as imagery and its structure, extending their understanding of how type influences all graphic products. Projects include a children’s book, Photoshop effects and alphabet creation.

Covered in this course:

- Sketching, rendering and composition
- Visual language
- Photoshop effects
- Magazine cover layouts
- Symbolism, metaphors and logos
- Typography
- Perception theory
Architecture T/A

The Architecture course is targeted towards conceptual, technical and artistic students who wish to learn about how spaces in residential and commercial buildings are constructed and how they affect human environments. Students create technical drawings by hand and learn to use Autodesk AutoCAD and Revit software.

Students build technical metalanguage used in the building industry whilst completing a house extension, then complete real project briefs from around Canberra, complemented by physical models. Theory covered is integrated into student projects including terminology, materials, and environmental sustainably design.

Covered in this course:
- Residential buildings
- Urban planning suburbs
- Architectural drawings
- Building materials
- 3D computer modelling
- Conceptual layouts
- Model making

Major Design Project T/A

Prerequisite: Study of three previous Design and Graphics units

Students follow a self-directed course in producing a portfolio addressing a self-determined problem or product redesign from the stream previously studied.

Covered in this course:
- Self-directed learning
- Developing own aims, objectives and learning goals
- Time management
- Professional standard portfolio
- Learning presentations
- Networking with industry

Previous major design projects have included designing an island resort, child’s storybook, residential knockdown/rebuild, DJ exhibition and ski helmet incorporating hidden headphones. A scale model using professional materials is produced to enhance the client communication.

For more information on any of the above pathways, please talk to the Design and Graphics teacher at the College Information Evening or when enrolling.

Please note: The Design and Graphics course is currently being rewritten for implementation in 2014. There will be some changes made to the units offered to accommodate this new course.

5.2.2 FASHION DESIGN AND TEXTILES (T/A)

Unit Description

Fashion is a changing reflection of the way we are and the times in which we live. This course examines fashion in clothing and décor in our contemporary society. It allows you to creatively express yourself through the medium of textiles and explore opportunities to develop life-long leisure interests and career directions.

Units will be offered in the following order:

2014

Semester 1 – Fashion Design and Production

In this unit students will explore design concepts and sources of inspiration. They will use appropriate technology in the production of a manufactured article within a team environment. Students will develop creative design solutions incorporating embellishment techniques and investigate ethical issues related to the design and manufacturing of textile products. The
structure of the Australian Fashion Industry will be studied including various roles within the industry and production processes.

2014

Semester 2 – Marketing Your Own Designer Label

In this unit students will explore the elements of marketing, including legal and ethical issues. Niche and mass produced markets and market sectors will be investigated and students will produce a niche range of products using textiles. Product lifestyle trends and fashion forecasting will be studied and the factors involved in operating a small fashion business. Students will also investigate consumerism in regards to being a fashion consumer and a small business operator.

2015

Semester 1 – Design for Fashion and Interiors

In this unit students will explore design concepts and processes in the development and production of garments and soft furnishings. Dyeing and printing processes will be investigated and students will experiment with a range of techniques before applying selected techniques to the production of textile items for fashion and/or interiors. Technological advances in dyeing and printing will be studied and eco fashion and sustainability of the fashion industry will also be explored.

2015

Semester 2 – Working with Fabrics

In this unit students will investigate the structure of fibres, yarns and fabrics and their production, properties and performance in regards to textile end uses. Technological developments in fabric production and the fashion industry will be explored and students will use technology to produce an original or innovative fabric and create and make a textile article using this fabric.

Please note: The Fashion Design and Textiles course is currently being rewritten for implementation in 2014. There will be some changes made to the units offered to accommodate this new course.

5.2.3 FOOD FOR LIFE (A)

This course is intended for all students who wish to learn more about food, food preparation and other factors which influence our food choices. It will enable students to evaluate and discuss health issues in connection with our lifestyles, and equip them with the knowledge to make better food choices.

Unit Description

All units are of a semester’s duration with an exit or entry at the end of each term.

2014

Semester 1 Food First

In this unit students will gain knowledge about food safety and hygiene, culinary terminology and equipment and the structure and sources of food and develop the skills to select, store, prepare and serve food effectively. Students will also learn about the role of food in our society to gain a greater understanding of individuals’ food choices and the role of food in entertaining.

Semester 2 Nutrition for Life

In this unit students will develop knowledge and skills to make informed decisions about healthy eating patterns using the abundance of food choices which are available in the Canberra
community. Students will learn to identify and understand the necessity of choosing a balanced diet for continued wellbeing throughout life.

2015
Semester 1       Food and Culture in Australia
In this unit students will focus on the development of food as a part of the differing cultures and unique cuisines including indigenous foods enjoyed in Australia today. Students will also explore the variety of foods available within our multicultural society and develop skills in the preparation of foods from different cultures.

Semester 2       Independent Living
In this unit students will explore ways to place a balanced meal on the table with a minimum of fuss. They will also acquire knowledge and skills, which enable you to make healthy food choices as independent adults. Students will also develop an understanding of the requirements for independent living and find out where to obtain the necessary information.

5.2.4  FURNITURE CONSTRUCTION (A/V)
This course is a vocational education course which is designed to enable students to gain a Certificate I in Furnishing - LMF10108.

This qualification can be used to gain credit towards a trade qualification or further study at CIT or another Registered Training Organisation (RTO). To gain the Certificate I in Furnishing students are also required to complete one Vocational Placement. This “on the job” Structured Workplace Learning is one week in duration.

All Furniture Construction units have a strong practical focus with students developing skills and knowledge through the manufacture of a number of projects and activities.

Furniture Construction is a sequential course with units offered in the following order:

Semester 1 2014
Furniture & Timber: Fundamentals
This is the first unit of study and is required for the successful completion of this course. The following are common competencies that are completed in all units during the 2 years:
- Occupational Health and Safety (common unit across all semesters)
- Use of hand and power tools (common unit across all semesters)
- Furniture project construction (common unit across all semesters)

This unit has the following additional emphasis:
- introduction to wood working skills
- introduction to timber joints
- measurement and calculations

Semester 2 2014
Furniture & Timber: Industrial Skills
This unit has the following additional emphasis:
- introduction to timber finishing
- workplace communication
- use of timber joints
Semester 1 2015
Furniture & Timber: Project
This unit has the following additional emphasis:
• working in a team
• use of solid timber joints
• participating in environmentally sustainable work practices

Semester 2 2015
Furniture & Timber: Timber Joints
This unit has the following additional emphasis:
• individual major project design and construction
• workplace communication
• working in a team
• use of solid timber joints

5.2.5 HOSPITALITY (A/V)
The Vocational Education and Training (VET) qualifications gained in this course will vary according to the combination of units completed by students during Years 11 and 12. Qualifications possible through this course include the following:
• Certificate I in Hospitality SIT10207
• Certificate I in Hospitality (Kitchen Operations) SIT10307
• Certificate II in Hospitality SIT20207
• Certificate II in Hospitality (Kitchen Operations) SIT20307

Please note that the Tourism, Hospitality and Events Training Package has been updated and there will be some changes to these qualifications in 2014.

All students must commence the course with the unit - Hospitality Essentials, as this unit contains competencies which are prerequisites for the other units. Successful completion of this unit will ensure that you are well prepared for the content and activities ahead in this course. As part of this course students also have the opportunity to complete two Vocational Placements (Structured Workplace Learning) in Hospitality workplaces.

Year 11 2014
Semester 1 - Hospitality Essentials
This is the first unit of study and is a prerequisite for the successful completion of this course.
This unit covers the following:
• Introduction to workplace hygiene
• Introduction to Occupational Health and Safety
• Introduction to the Hospitality Industry
• Introduction to food preparation and presentation

Semester 2 - Select one of the following pathways:
Hospitality Kitchen Procedures
Continues the development of food preparation & presentation skills from the semester Hospitality Essentials unit.

Hospitality Service Procedures
Food & beverage preparation & service skills are developed through working in the Erindale College Cafe.

Year 12 - 2015
Semester 1
Select one of the following pathways that build upon your Year 11 studies:

Professional Catering Essentials
Menu design, planning and production skills are developed through working in the Erindale College Class Act Training Restaurant.

Service Operations
Food and beverage service skills are developed through working in the Erindale College Class Act Training Restaurant.

Semester 2
Select one of the following pathways that build upon Year 11 and your studies in Semester 1.

Professional Catering
Menu design, planning and production skills are developed and refined through running the Erindale College Class Act Training Restaurant.

Coffee Service
Food and beverage service skills are developed and refined through working in the Erindale College Class Act Training Restaurant.

Please note: The Hospitality course is currently being rewritten for implementation in 2014. There will be some changes made to the units offered to accommodate the new qualifications and this new course.

5.2.6 INFORMATION TECHNOLOGY (T/A/V)

The Information Technology course caters for diverse groups of students who undertake IT studies including students seeking to study IT at university, enter the workforce post college or who enjoy IT and computing and wish to expand their knowledge and skills but are not likely to continue formal studies in this area or seek employment in the IT industry.

The nationally recognised qualification possible through successful completion of this course is a Certificate II in Information, Digital Media and Technology (ICA20111).

At Erindale College there are two streams of Information Technology offered – Digital Media and Programming.

The units available in the Digital Media stream are:

- Digital Media Foundations, Audio & Video (1.0)
- Digital Media Graphics and Animation (1.0)
- 3D Modelling, Animation and Texturing (1.0)
- Website Design (1.0)
- Dynamic Website Construction (1.0)

The units available in the Programming stream are:

- Programming Fundamentals (1.0)
- Intermediate Programming (1.0)
- Robotics and Intelligent Systems (1.0)
- Computer Games Programming and Design (1.0)
- Systems Analysis Design (1.0)
- Microcontrollers (1.0)

The sequence of units offered in 2014 will depend on student interest and staff availability.

For more detailed information on each unit you can visit the Board of Senior Secondary Studies website at [http://www.bsss.act.edu.au/curriculum/courses](http://www.bsss.act.edu.au/curriculum/courses) or talk to the Information Technology teacher at the College Information Evening or when enrolling.

5.2.7 METAL TECHNOLOGY (A)
This course allows students to study Metal Technology to achieve a major, minor or an ungrouped single unit. Students enjoy predominantly practical work in these units, though sketching and theory exercises supplement the learning and provide experiences where technical language is developed. In this course students will use a range of tools and specialist equipment to construct set projects and personal projects. This course aims to provide students with appropriate skills, knowledge and attitudes which will equip them to make an informed decision on seeking a career in many industries eg. plumbing, building, metal trades, and professions in engineering, quantity surveying and construction management.

All units are of one semester duration but term units exist in the first and fourth units.

Students who undertake this course will be expected to complete a series of practical projects to incrementally improve their fabrication skills each semester, and if they have prior knowledge and skills they are encouraged to develop their own projects.

Semester 1 2014

Introduction to Metal Technology
This unit introduces the basic skills to produce metal based projects and covers practical experience in OH&S, basic sheet metal processes and fabrication, Oxy/Acetylene Welding processes, project design and the use of a CAD program to develop working plans and drawings.

Semester 2 2014

Metal Technology
This unit expands the skills to produce metal based projects and covers further experience in OH&S, hard and soft soldering processes and fabrication, MIG Welding processes, lathe operations, extended project design and the use of a CAD program to further develop the ability to produce more complex working plans and drawings.

Semester 1 2015

Metal Technology Design
This unit continues to expand the skills to produce metal based projects and covers more experience in OH&S, fusion metal welding processes and fabrication, Arc welding processes, more advanced lathe operations, use of the milling machine, extended project design and the use of a CAD program to further develop the ability to produce more complex working plans and drawings.

Semester 2 2015

Metal Technology Project
This unit expands the skills even further to produce metal based projects and covers more experience in OH&S, fusion metal welding processes and fabrication, all welding processes, even more advanced lathe operations, use of the Milling machine, extended project design and the use of a CAD program to further develop the ability to produce more complex working plans and drawings.

Please note: The Metal Technology course is currently being rewritten for implementation in 2014. There will be some changes made to the units offered to accommodate this new course.

5.2.8 TOURISM AND EVENT MANAGEMENT (A/V)
The nationally recognised qualification possible through successful completion of this course is a Certificate II in Tourism SIT20107.

This course aims to provide students with the appropriate skills, knowledge and attitudes to:

- make an informed decision regarding seeking a career in the Tourism/Hospitality industry
- work in the operational areas of the Tourism industry with greater confidence and expertise
This tourism course serves four groups of students:

- Students wishing to gain employment skills to move directly into Tourism as a career
- Students who wish to do further study in Tourism at CIT/TAFE or other Registered Training Organisations
- Students who intend to go on to tertiary study of Tourism, eg University of Canberra
- Students who wish to gain skills and knowledge useful to other areas of employment or training.

As part of this course students also have the opportunity to complete Vocational Placements (Structured Workplace Learning) in Tourism workplaces.

2014

Semester 1 – Working in Tourism

This unit covers the following areas:

- Working with colleagues and customers
- Australian destination information and advice
- International destination and advice
- Workplace communication – telephone and word processing

Semester 2 – Tourism and Events Promotion

This unit covers the following areas:

- Event information collection and presentation
- Online information & booking systems
- Access and interpret product information
- Create a promotional display or stand
- Scripted commentary and presentation.

2015

Semester 1 – Tourism and Event Management

This unit covers the following areas:

- Introduction to the Tourism industry
- Australian Tourism destinations
- Selling Tourism products and services
- Providing information on Tourism products and services

Semester 2 – Global Tourism

This unit covers the following areas:

- Workplace diversity
- Tourism work environment safety and OH&S
- Online Tourism information & booking systems
- International destination research and advice

Please note: The Tourism and Event Management course is currently being rewritten for implementation in 2014. There will be some changes made to the units offered to accommodate the new qualification and this new course.