Technology & Enterprise

@ MINDARIE SENIOR COLLEGE

* Indicates List B Courses

ATAR Accounting & Finance*

What is ATAR Accounting & Finance?

ATAR Accounting and Finance is a course which will improve your financial literacy. It will show you how bookkeeping is done and teach you how to create and interpret financial reports. It will assist you in making good decisions with your money and understand financial requirements in business.

What will we cover?

- Entering business transactions into journals and ledgers
- Taking out a Trial Balance
- Corporate Social Responsibility
- Financial literacy
- Creating financial statements such as the Income Statement and Balance Sheet
- GST (Goods and Services Tax) and BAS (Business Activity Statement) requirements for small businesses
- Financial ratios

What does a typical week look like?

The course is mainly practical in nature and usually three hours per week will be completing practical work while one hour per week is focused on theory work. Students will be required to complete one project a semester at home while all other assessments are in class. Students will be required to complete work not done in class in their own time.

Complementary Courses

- General Business Management and Enterprise
- ATAR Economics

What courses and careers can it lead to?

This course can be used in any future profession as the skills learnt are applicable across all types of businesses. Students can go on to complete a degree in Commerce or Business. They can also go to TAFE and complete a Certificate IV in Business or a Diploma in Business.

https://myfuture.edu.au/bullseyes/details/4--business-studies

Are there any prerequisites?

- C grade in Year 10 English & Mathematics

General Accounting & Finance*

What is General Accounting & Finance?

This course aims to make students financially literate by creating an understanding of the systems and processes through which financial practices and decision making are carried out, as well as the ethical, social and environmental issues involved. It helps students to analyse and make informed decisions about finances. We all know that leaving school can be quite daunting. Leaving school equipped with the tools and ability to manage your own budget, taxes and overall finances is a bonus.

What will we cover?

The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair.

Unit 1 - Personal finance
Students will start their year with the basics of credit management exploring bank credit cards, personal loans and mortgages. They will also be introduced to different ways to protect their personal information. We will then progress to budgeting and managing their personal finances.

Unit 2 - Accounting for small cash entities
Students will explore financial institutions and systems as well as recording and evaluating financial information through journals and financial statements.

What does a typical week look like?

Students will work in a spacious and well-resourced environment equipped with computer and internet access. 80% of the work will be done with the assistance of booklets. The course however requires 50% theoretical concepts and understanding to complete projects and assessments. 50% of the work done in class will be practical components.

Complementary Courses

- General Business Management & Enterprise

What courses and careers can it lead to?

Level 4 Certificate: Accountant, Actuary, Financial analyst, Financial dealer, Financial planning advisor
Level 1 Certificate: Bookkeeper, Bank worker, Credit or loans officer

https://myfuture.edu.au/bullseyes/details/4--business-studies

There are no prerequisites for this course.

General Business Management & Enterprise

What is General Business Management & Enterprise?

The General Business Management and Enterprise (BME) course focuses on how to establish and operate a small business in Australia. It provides students with an understanding of the knowledge of the processes and procedures required for generating business ideas, and skills to turn them into a viable business venture. BME equips students to participate pro-actively in the world of business, behave responsibly and demonstrate integrity in business activities.

What will we cover?

Students will commence their business studies by investigating the success and failure of small business in Australia. We also research the different aspects of enterprise and innovation; this is an important aspect of business as it can create job opportunities, business interest in the Australian market, and diversify into various sectors in the world. With the emerging new technologies, we need to embrace technologies to create business opportunities.

What does a typical week look like?

For four hours a week, students read a variety of business articles, news and the BME textbook. In addition, we watch short videos and news stories to supplement our understanding. Students will complete assessments related to these topics.

Complementary Courses

- ATAR/General Accounting & Finance
- ATAR Economics

What courses and careers can it lead to?

Certificate III in Finance, Certificate IV in Business, Bachelor of Business, Bachelor of Commerce

https://myfuture.edu.au/bullseyes/details/4--business-studies

There are no prerequisites for this course.

General Design (Technical Graphics)*

What is General Design (Technical Graphics)?

General Design (Technical Graphics) teaches students how to design products using 3D software.

What will we cover?

We cover the programs used to create 3D design products such as mobile phone stands, furniture, shop interiors and houses.

What does a typical week look like?

There is a mix between practical and theory components. A typical week is about three and a half hours of practical and a half hour of theory.

Complementary Courses

- Materials, Design & Technology (Wood)
- ATAR/ General Engineering (Mechatronics)
- ATAR/General Visual Art

What courses and careers can it lead to?

Drafting, Architecture, Engineering, Product Design, Computer Assisted Design and many more

https://myfuture.edu.au/bullseyes/details/33--textiles-and-design

Are there any prerequisites?

- This course **cannot** be studied with General Design (Photography)

General Children, Family and the Community: Caring for Others

What is General Children, Family and the Community: Caring for Others?

We focus on factors that influence human development and the wellbeing of individuals, families and communities. Students develop an understanding of the social, cultural, environmental, economic, political and technological factors which have an impact on the ability of individuals and families to develop skills and lead healthy lives. They recognise how promoting inclusion and diversity among individuals, families and groups in society contributes to the creation of safe, cohesive and sustainable communities.

This course runs for **Year 11 ONLY**. In Year 12, students will enrol in Certificate II in Community Services.

What will we cover?

- Family roles and responsibilities
- Developmental milestones
- Support services available in the community
- Influences on children's health
- Ethics and sustainability
- The importance of play

Students will be asked to care for a virtual baby, investigate the importance of play, and produce a playground model and will have an opportunity to interact with young children.

What does a typical week look like?

Students will work on course content for half the week and have time for assessments and project work for the other half of the week. All coursework and assessment tasks will be completed in class time.
Guest speakers are invited to talk to students, when possible, to provide insight into real-life experiences.

Complementary Courses

- General Food Science and Technology
- General Materials, Design & Technology (Textiles)

What courses and careers can it lead to?

Career pathways in education, nursing, community services, childcare and health

https://myfuture.edu.au/bullseyes/details/18--home-economics

Are there any prerequisites?

- Year 10 Children, Family and Community is desirable but not essential for success in this course
- This course cannot be studied with Children, Family and the Community: Living Independently

General Children, Family and the Community: Living Independently

What is General Children, Family and the Community: Living Independently?

This course focuses primarily on adolescents; it aims to provide them with knowledge and practical skills that prepare them for life after school. The Course assists in teaching students basic life skills that can enhance all facets of adolescent development. In addition, it explores the risk factors for adolescents in contemporary society and looks at community support networks available to adolescents in need. Alongside this, we take part in events for charities/community awareness campaigns, such as R U OK day and The Patricia Giles Centre. At the end of the Course, students will have a toolkit of resources that will assist them with making informed choices, managing stress, understanding the cost-of-living post school life, and the importance of being a part of a sustainable community.

This course runs for **Year 11 ONLY**. In Year 12, students will enrol in Certificate II in Community Services.

What will we cover?

The nature of diverse Australian families is explored, with an emphasis placed on adolescents transitioning from their family life to becoming an empowered, independent, sustainable community member.

- Contemporary Australian families
- Rules, laws and sanctions (driving, phone use, alcohol, drugs, consent)
- Growth and development of teenagers

- Contemporary issues affecting teenagers (peer pressure, alcohol, drugs, social media, body image, family break down, nutrition)
- Moving out sustainably

Students will coordinate a fundraiser for R U OK day and use the funds generated to go out on an excursion to purchase items for those in in need.

What does a typical week look like?

The Course is made up of approximately 50% theory work and 50% practical work. Students will participate in practical components such as producing mosaics, screen printing, textile projects (care packages for people in need), cooking, physical exercise, creating marketing posters, producing laser cut stickers for water bottles. Guest speakers from the Salvation Army, The Patricia Giles Centre and the RAC, and work with a Health and Wellness expert (specifically for teens) will present to students throughout the year.

Complementary Courses

- General Food Science and Technology

- General Materials, Design & Technology (Textiles)

What courses and careers can it lead to?

Certificate II in Community Services.
https://myfuture.edu.au/bullseyes/details/6—community-services

Are there any prerequisites?

- This course **cannot** be studied with Children, Family and the Community: Caring for Others

ATAR Computer Science*

What is ATAR Computer Science?

The Computer Science ATAR course aims to develop students' skills in designing, maintaining, and producing relational databases and digital solutions; solving problems with algorithms, data structures, and programming languages; and addressing cybersecurity issues.

What will we cover?

There is a heavy focus on developing Programming skills using Python and implementing solutions to problems. We cover CISCO Networking, Microsoft Access and SQLite for Database creation and manipulation. Lastly, we investigate Cyber Security and its impact on Computer Systems and Businesses.

What does a typical week look like?

There is a good mix of theory and practical, so most weeks have theory sessions combined with practical activities. We have a mixture of practical and theory-based assessments, and our week will normally reflect that depending on our upcoming or current assessments. Exam preparation takes a focus leading up to the exam breaks and there is no theory during this time.

Complementary Courses

- General Design (Technical Graphics)
- ATAR/ General Engineering (Mechatronics)

What courses and careers can it lead to?

Engineering. Software development. Cyber security.

https://myfuture.edu.au/bullseyes/details/7--computing

Are there any prerequisites?

- C grade in Year 10 English & Mathematics

General Computer Science*

What is General Computer Science?

General Computer Science is a fascinating field that involves studying and working with computers.

What will we cover?

We teach students to use and maintain personal computers, develop information systems, and understand related social, ethical, and legal issues in Semester 1 before moving on to networks, internet technologies, programming, and software development. The focus on programming is to learn Python Programming during the GrokLearning challenge as well as creating games using the GameMaker software suite.

What does a typical week look like?

There is a mix between practical and theory components. Most weeks consist of completing in-class projects based on the Course assessments. We do have sessions of Theory, reinforced with activities to prepare for the Theory Assessments.

Complementary Courses

- General Design (Technical Graphics)
- ATAR/ General Engineering (Mechatronics)

What courses and careers can it lead to?

Engineering. Software development. Cyber security.

https://myfuture.edu.au/bullseyes/details/7--computing

There are no prerequisites for this course.

ATAR Engineering Studies (Mechatronics)*

What is ATAR Engineering Studies (Mechatronics)?

The ATAR Engineering Studies (Mechatronics) course provides opportunities for students to investigate, research and present information, design and make products and undertake project development. These opportunities allow students to apply engineering processes, understand underpinning scientific and mathematical principles, develop engineering technology skills and explore the interrelationships between engineering and society.

What will we cover?

- Electrical/electronics components
- Working with circuit boards
- Robotics

- Mechatronics
- Resistors and how power works with them
- Fundamental engineering concepts

What does a typical week look like?

Students will cover a large amount of theory in this course which is complemented by practical application of these understandings in our purpose built Mechatronics lab. Students should expect about 70% theory and 30 % practical work. Students will work with soldering irons, 3D printers and electrical componentry.

Complementary Courses

- ATAR Physics
- ATAR/General Computer Science

- ATAR Mathematics Methods
- ATAR Mathematics Specialist

What courses and careers can it lead to?

Engineering. Construction. Computer Science. Robotics.

https://myfuture.edu.au/bullseyes/details/10--electrotechnology

Are there any prerequisites?

- B grade in Year 10 Science & Mathematics
- OLNA Numeracy Category 3 or pre-qualification through NAPLAN9

General Engineering Studies (Mechatronics)*

What is General Engineering Studies (Mechatronics)?

The Mechatronics course combines mechanics, electronics and computer programming and design in a theoretical and practical course. Students learn basic aspects of electronics and will work on projects to develop techniques and products that satisfy human needs.

Students will develop skills in all areas and use them to create self-regulating systems and autonomous robots.

What will we cover?

Students develop engineering technology skills in planning and implementing a process to manipulate tools and machines to produce a prototype of their designed solution in the area of mechatronics and build machines and robots.

What does a typical week look like?

This course is essentially a practical course focusing on real-life contexts. Students apply a design process to research and present information about materials, engineering principles, concepts and ideas, and design proposals. Students can expect about 60% practical and 40% theory.

Complementary Courses

- ATAR Physics
- ATAR/General Computer Science

- ATAR Mathematics Methods
- ATAR Mathematics Specialist

What courses and careers can it lead to?

Certificate of Engineering at TAFE, Degree in Engineering with additional study, Robotics and Mechatronics.

https://myfuture.edu.au/bullseyes/details/10--electrotechnology

Are there any prerequisites?

- C grade in Year 10 Science & Mathematics
- OLNA Numeracy Category 3 or pre-qualification through NAPLAN9

ATAR Food Science & Technology*

What is ATAR Food Science & Technology?

This Course is split into two units across each semester. The focus of Unit 1 is Food Science, where students instigate sensory, physical and chemical properties of food. Through practical cooking lessons students will learn about the functional properties, which determine the performance of food alongside this, Societal and Economical influences on food choice will be covered.

The focus of Unit 2 is the under-cover story, where students learn about food spoilage, contamination, and reasons for preserving food. Furthermore, students consider food safety laws and regulations whilst investigating safe preservation, packaging, labelling, and storage of food. Students will apply the technology process to devise food orders, production plans and food costing to aid them in producing safe, quality food.

What will we cover?

- Primary and secondary food processes
- Nutrition and diet related diseases
- Properties when designing and evaluating products or services

- Adapting Recipes
- Food Processing techniques
- Varying nutritional needs of demographic groups
- Food Models

What does a typical week look like?

In a typical week students will participate in one practical (cooking) one-hour lessons in the kitchen, one lab and one two-hour theory lesson in the classroom.

Complementary Courses

- ATAR/General Health Studies
- ATAR/General Human Biology

What courses and careers can it lead to?

Food production. Nutrition. Health Promotion.

https://myfuture.edu.au/bullseyes/details/14--food-studies

Are there any prerequisites?

- C grade in Year 10 Mathematics

General Food Science & Technology*

What is General Food Science & Technology?

General Food Science and Technologies explores the world of food. What, why and how do we treat, and eat in our daily diet.

What will we cover?

We explore the world of Nutrition:

- Local food production
- How foods are treated from farm to fork
- Major food stuffs produced around the world

- A weekly cooking lesson that gives you an understanding of the idea and the skills to complete the dishes

What does a typical week look like?

General Food Science and Technology has a 50/50 spilt of theory vs practical. Students enjoy a two-hour practical lesson every week. Our theory lessons are broken into two hourly single classes over the remaining lessons.

Complementary Courses

- ATAR/General Health Studies
- General Children, Family and the Community

- ATAR/General Human Biology

What courses and careers can it lead to?

Numerous roles in Hospitality, Tourism and in particular the catering industries as well as Food Safety Officers to a Sports Nutritionist.

https://myfuture.edu.au/bullseyes/details/14--food-studies

Are there any prerequisites?

- No, but a good command of English and basic computer skills with an operating knowledge of Microsoft office suite will always make navigating the course and its assignments easier.

General Materials, Design and Technology (Textiles)*

What is General Materials, Design and Technology (Textiles)?

This course is all about designing and making fashion garments. Students who are creative and enjoy art and sewing are encouraged to undertake the Course. Students will design and make clothing garments and accessories. By studying this course, focused on Fashion and Design, you will learn design and construction skills as well as fashion illustration techniques that will give you an excellent grounding to pursue a career in the exciting world of fashion.

What will we cover?

We aim to provide students with an understanding of the design process used to create a textiles product. Students will experiment with fabric embellishment techniques, such as beading, screen printing, dying, hand stitching and machine embroidery. Students will follow the design process to construct fashion garments. Students will also examine the impact 'Fast Fashion' has on the environment. Students will learn about how clothing companies are using more sustainable and ethical ways of production to appeal to consumer needs.

What does a typical week look like?

Students will sew for two hours in their double session. The other two hour single sessions will be spent designing and researching ideas for garments.

Complementary Courses

- ATAR/General Visual Arts
- General Design (Technical Graphics)
- General Design (Photography)

What courses and careers can it lead to?

Fashion designer. Fashion buyer/stylist. Pattern maker. Production machinist. Textile designer.

https://myfuture.edu.au/bullseyes/details/33--textiles-and-design

Are there any prerequisites?

- No, but sewing ability is preferred.

General Materials, Design and Technology (Wood)*

What is General Materials, Design and Technology (Wood)?

In this course we look at the Design Process and how students can apply this to their projects. We then learn how to hand-draw technical images and expand our knowledge of different timbers for building.

What will we cover?

We explore different building techniques and learn about Occupational Health and Safety and the Standard Operating Procedures of the machinery in the workshop.

What does a typical week look like?

During one week, students have four classes, and the work is divided between the workshop and the classroom. Two hours are learning about the design process, drawing, the environment and sustainability. The other two hours are in the workshop focused on practical work and building the projects.

Complementary Courses

- ATAR/General Visual Arts
- General Design (Technical Graphics)

What courses and careers can it lead to?

Carpentry. Cabinet making. Construction. Architecture. Electrician.

https://myfuture.edu.au/bullseyes/details/20--industrial-arts

Are there any prerequisites?

- No, but Year 9 & 10 Woodwork are preferred.

BYOD @ MSC

Mindarie Senior College is a Bring Your Own Device (BYOD) school. The BYOD program encourages students to develop the confidence, capabilities and collaborative skills required to be successful in the 21st Century. Research shows that consistent access to resources enables improved learning outcomes for all students. **Students are required to bring a fully charged device to the College every day.**

The following minimum specifications are essential (the device does not have to be new):

Processor	i3 (or equivalent) 12th Gen or better
Memory (RAM)	8 GB
Screen Size	10 inches
Hard Drive/storage	128GB or higher
Operating System	Windows 10 (Windows S mode is *NOT* suitable) MacOS 10.15.7 (or higher) Apple iOS 14 or later
Battery Life	8 hours continuous use
Mandatory Software	Microsoft Office (free download available for all enrolled students) Mac users are encouraged to utilise anti-virus software Windows has Defender built in
Recommended	Solid State Drive (SSD), Touch Screen and Stylus (Digital Pen)

Please note:

When your child brings their own device to school, they do so at their own risk. We would strongly recommend you purchase personal insurance that covers this. The College will not cover the cost of loss or damage to your child's device.

Students will need an office software suite such as Microsoft Office. All enrolled students may download and use Microsoft 365 on their own device, free of charge. Instructions are available on the College website. Some College owned specialist software will not be available to students to install on their own devices, but alternatives will be suggested.

We recommend students use their OneDrive account (provided by the Department of Education) to save files and back-up data. This allows them to access files from any device, anywhere.