

## Grade 12

### Diploma Requirements:

- 15 credits English (must have 30-1 or 30-2)
- 15 credits Social Studies (must have 30-1 or 30-2)
- 10 credits Mathematics (must have 20 level)
- 10 credits Science (must have 20 level)
- 6 credits of Phys Ed 10 and Calm 10
- 10 credits of Options
- 10 credits of any 30-level courses (other than English or Socials)
- Additional 24 credits from grade 10-12

### University of Alberta Entrance Courses: average of these 5 subjects:

- Bachelor of Engineering: English 30, Math 30, Math 31, Physics 30, Chem 30
- Bachelor of Science: English 30; Math 30; only need 2 sciences, but some majors require 3; extra course from any group A/B/or C
- Bachelor of Arts: English 30; choose 4 courses (one can be Art or Drama)

Group A (Humanities)	Group B (Fine Arts)	Group C (Maths/Sciences)
Social Studies 30-1 Microeconomics/Macroeconomics 30 (must be presented together) 30-level Language other than English Aboriginal Studies 30	Art 30 Drama 30 Art 31 Applied Graphic Arts 35 Communication Technology Advanced Level-Career and Technology Studies (CTS) Dance 35 Music 30 Music 35 Musical Theatre 35 Performing Arts 35 A, B, or C	Biology 30 Chemistry 30 Mathematics 30-1 Mathematics 30-2 (see Note 3) Mathematics 31 (calculus) Physics 30 Science 30 Computing Science (CSE) Advanced Level-Career and Technology Studies (CTS)

1. Applicants wishing to present either a 35-level Language or a language other than one of those presented at the Grade 12 level in Alberta should contact the Admissions Unit, Office of the Registrar.
2. Equivalents of Music 30: Conservatory Canada, Grade 8 Practical and Grade IV Theory; Royal Conservatory of Music of Toronto, Grade 8 Practical, Grade II Theory, Mount Royal University, Grade 8 Practical and Grade II Theory. Documents must be presented to Alberta Education for evaluation.
3. Mathematics 30-2 will be accepted as a Group C admission subject to some programs. For further information, please see the Faculty admission requirements ([Admission Requirements by Faculty](#)) for each program of study.
4. If Final Grade 12 marks are not available at the time when an admission decision is made, marks from Final Grade 11 or Interim Grade 12 prerequisites to the following courses may be used.

## Sample Plans to Prepare for University (UofA)

### Bachelor of Engineering: English 30, Math 30, Math 31, Physics 30, Chem 30

- Computer Science is not mandatory, but is recommended
- Can take Dual Credit, AP, or any other option during any “Fun Option”

Grade 12	
1st Semester	2nd Semester
Math 30	Math 31
English 30	Physics 30
Socials 30	Chem 30
Computer Science 20	Computer Science 30
Dual Credit or Math AP	Dual Credit or Fun Option 30

### Bachelor of Science: English 30; Math 30; only need 2 sciences, but some majors require 3; extra course from any group A/B/or C (above)

- Fun Option: NOTE- Can use Art 30, Drama 30, Micro/Macroeconomics, Socials 30, Computer Science to apply to UofA
- Can take Dual Credit, AP, or any other option during any “Fun Option”
- Check [Science Prerequisites | Faculty of Science](#) for specific requirements for each Major

Grade 12	
1st Semester	2nd Semester
Math 30	Physics 30
English 30	Socials 30
Bio 30 or Fun Option 30	Chem 30
Fun Option 30	Fun Option 30
Dual Credit or Fun Option 30	Dual Credit or Fun Option 30

**Bachelor of Arts: English 30; choose 4 courses (one can be Art or Drama)**

- Fun Option: NOTE: Can use Art 30, Drama 30, Micro/Macroeconomics, Socials 30, Computer Science to apply to UofA
- Can take Dual Credit, AP, or any other option during any “Fun Option”

<b>Grade 12</b>	
<b>1st Semester</b>	<b>2nd Semester</b>
Math 30	Bio 30
English 30	Socials 30
Physics 30 or Fun Option 30	Chem 30
Fun Option 30	Fun Option 30
Dual Credit or Fun Option 30	Dual Credit or Fun Option 30

**Grade 10-12 Options at Aurora**

These Options can be used to apply for a B.Sc or B.A program at university instead of a core course; please be sure to check your specific program requirements:

- Microeconomics & Macroeconomics 30
- French 30
- Drama 30
- Art 30
- Computing Science 30-level

“Fun” Options That Can Be Used For Diploma:

- CALM and HCS 3000 Work Experience (4 credits)
- Phys. Ed. 10
- 10 credits of any of the following options (worth 3 credits each)
  - Leadership 15/25/35
  - Debate 15/25/35
  - Law and Legal Studies 10/20
  - Micro/Macroeconomics 20/30
  - French 10 , 11, 12 - online
  - Foods 10/20
  - Esthetics/Cosmetology 10
  - Computer Science 10/20/30/AP
  - Phys Ed 20 & 30
  - Personal Fitness 10/20/30
  - Athletic Therapy 10/20/30
  - Health Care Services 10
  - Psychology 20 & 30 AP
  - Linear Algebra 25
  - AP Capstone Seminar, Research, & Diploma
  - AP English Literature
  - AP Comparative Government & Politics
  - AP Biology
  - AP Chemistry
  - AP Physics
  - AP Computer Science Principles

**Options that can be used for university entrance:**

<b>MICRO/MACROECONOMICS 20/30</b>	5 Credits	NO FEE
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Microeconomics: students will learn about people, prices, and profits by covering: Economics in everyday living 2. How an economic system functions 3. The theory of demand and supply 4. The policies of individual firms 5. The individual and the economy 6. Credit 7. The function of organized labour and collective bargaining 8. Agriculture and economics 9. Pure competition, oligopoly and monopoly 10. Advertising

Macroeconomics: students will learn about markets, money, and management: Introduction to economics 2. Economics as a discipline 3. The functions of an economic system 4. The concepts of specialization and division of labour and the consequences of their application in economics 5. The nature, importance and function of money and banking 6. Inflation and its influences on the economy 7. The use of index numbers in measuring cost of living and other statistical measures 8. GNP and national income as ways of measuring the effectiveness of the economic system 9. The relationship of spending and employment 10. The classical roots of economic principles 11. The economics of government 12. Government controls of business cycles 13. Economics and specialization 14. Income distributions 15. Interdependence in an economy 16. Basic economic theories and systems 17. Economics and developing countries

<b>FRENCH 10-9Y, 20-9Y, 30-9Y</b>	5 Credits	NO FEE
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FRENCH 10-9Y, 20-9Y, 30-9Y - online program through Prairie Land Academy

The French 10-20-30-9Y (9 year) course sequence is designed for students who have successfully completed French 9 in junior high, with satisfactory completion of at least three to six years of French as a Second Language Studies. In French 10, students will be building on their previous knowledge and skills, focusing on use of the infinitive, the recent past and the passé composé in the context of specific topics/themes including: school life, sports, excursions, travel and film. French 30-9Y can also be used to apply to certain university programs.

<b>DRAMA 10/20/30</b>	3 Credits	NO FEE
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Drama fosters positive group interaction as students learn to make accommodations in order to pursue shared goals. Students will learn to communicate in various ways and work creatively with others as they discover dramatic expression. Through eight dramatic disciplines, they will develop both performance and technical skills, becoming more confident in themselves and their ability to work together. Through movement, speech, improvisation, acting, theatre studies, technical theatre design, playwriting and directing, they will express themselves creatively and work with others to bring dramatic situations to life.

<b>ART 10/20/30</b>	5 Credits	NO FEE
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This is a foundational studio course, emphasising basic design and its application in a wide variety of materials. Art 10/20/30 also attempts to help individuals develop the skills,

techniques and confidence necessary for self-expression. An awareness of art in the past and present, and sensitivity to one's surroundings are encouraged.

<b>COMPUTING SCIENCE 10/20/30/AP</b>	3 Credits	NO FEE
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Computing Science focuses on emerging technologies and creative programming. Students are introduced to programming and manipulating art and graphics. We then explore web design and complete a project of choice. Students explore hardware, software and processes. This includes an introduction to the algorithm as a problem-solving tool, to programming languages in general and to the role of programming as a tool for implementing algorithms. Students work with structured programming constructs by adding the selection and iteration program control flow mechanisms to their programming repertoire. They write structured algorithms and programs that use blocks to introduce an element of modularity into their programming practice.

**“Fun” Options - cannot be used for university entrance, but can be used for diploma credits**

<b>LEADERSHIP 15/25/35</b>	5 Credits	NO FEE
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This program is designed to allow students to develop their personal leadership style. This course is very much student driven; students will have the time and freedom to explore their interests and passions, and will choose an area of the school, the community, or the wider world in which to create lasting positive change. All students in the leadership program will be involved in putting on many key activities in the school. These include: lunchtime activities, volunteer projects, school improvement, school spirit activities, staff and student recognition, and other student driven initiatives. This course will also explore different styles of leadership, and how famous leaders have modelled them. They will also be required to complete a minimum of 20 volunteer hours. Leadership 25 and 35 will include modules on mentorship and becoming more involved in the community.

<b>DEBATE 15/25/35</b>	3 Credits	NO FEE unless compete
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Students use a variety of formats and structures for speech and debate to plan and execute effective presentations. This course sequence provides students with opportunities to build confidence in their public speaking abilities and refine and enhance their delivery and formal presentation skills. Students in Speech and Debate 15-25-35 undertake intensive research on a variety of issues, which develops their research skills and their ability to synthesize complex information. This course sequence encourages responsible citizenship through the examination and analysis of a variety of social issues. Issues of a sensitive or controversial nature may be encountered or explored in this course. All curricular outcomes are intended to be achieved independent of any participation in speech and/or debate competitions.

<b>LAW &amp; LEGAL STUDIES 10/20/30</b>	3 Credits	NO FEE
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What are an individual's rights? Through the use of realistic scenarios and case studies, students will gain a better understanding of our legal system. This course will also look at various elements of criminal and civil law, and specifically at the Youth Criminal Justice Act. Legal Studies 20 examines topics in family, employment, environmental, and indigenous law. Legal Studies 30 topics include property, small business, and criminal law as well as dispute resolution, negligence, and landmark decisions. This course is ideal for students interested in careers in law, policing or social work or who are planning to take Dual Credit Law.

<b>HCS 3000: WORKPLACE SAFETY</b>	1 Credit	NO FEE
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Included in CALM -This course will give students the fundamentals of workplace safety practices. Students will learn basic practical knowledge for off-campus education and a safer work experience. After course completion, students will understand the principles and practices of workplace health and safety. (prerequisite course required to participate in Work Experience or Registered Apprenticeship Programs)

<b>WORK EXPERIENCE</b>	Up to 15 credits	Online
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Students can apply for work experience credits for summer internships or work during the year if it is related to their degree. Each 25 hours you work at your job, either paid or unpaid, earns one credit at the 10, 20 or 30 level. Please see Mr. Millard for more information. You must complete HCS 3000 before beginning work experience.

<b>FOODS 10/20/30</b>	3 Credits	\$50 extra fee
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This course provides students with preparation and presentation techniques, food safety skills, and information about nutrition and food ecology. Foods 10 focuses on baking, snacks, meal planning, the multicultural foods of Canada, and the definition of "farm to table". Foods 20 topics may include healthy decisions, cakes and pastry, bread, milk and egg products, soups and sauces, meat/fish/poultry, intermediate meal planning, international foods, and vegetarian cuisine. Students must be able to handle various types of proteins and animal products. Foods 30 is an intense program meant to prepare students to apprentice in professional kitchens.

<b>ESTHETICS &amp; COSMETICS 10 (no 20/30)</b>	5 Credits	NO FEE
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This course is taught from a science-based perspective. Topics include the structures, functions, and care of the skin, the physiology of the face and hands, theatrical and personal make-up, and a knowledge of the significance of personal grooming and health. Students will be required to present a project at the Science Fair.

<b>PHYS ED 20/30</b>	5 Credits	\$70 extra fee
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Through activities in the school and community, students will explore what they are capable of and improve their physical abilities. They will enjoy better fitness and well-being and an improved body image. Communicating with others, they will develop a sense of fair play and

exercise their leadership abilities. Students will understand the importance of safe, active living for life; and they'll set goals and challenge themselves as part of an active, healthy lifestyle.

<b>PERSONAL FITNESS 10/20/30</b>	3-5 Credits	\$50 extra fee
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This course introduces key concepts in exercise, fitness, nutrition, and psychology aimed at improving student athletic performance and overall health and wellness. Students will earn credits in the Health, Recreation and Human Services cluster of the Career and Technology Studies curriculum. This course will include classroom theory, self-directed study, and exercise labs. This course is a good introduction for students interested in pursuing post-secondary studies and/or a career in kinesiology, sports and recreation.

<b>ATHLETIC THERAPY 10/20</b>	3-5 Credits	\$50 extra fee
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Students learn prevention, assessment and management techniques related to injuries that may occur during recreation and sporting events and activities. Students explain and practise basic taping and wrapping fundamentals, explore the role of the athletic therapist, identify first-aid supplies, describe common injuries, and apply basic taping and wrapping techniques to various body regions. Students explore the structure and function of the musculoskeletal system, gain an understanding of conditions of the musculoskeletal system and achieve an appreciation for the benefits of practising a healthy lifestyle as it pertains to the individual, family, peers, and community. (PREREQUISITE: Personal Fitness 10 or Health Science 10)

<b>HEALTH CARE SERVICES 10</b>	3 Credits	NO FEE
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HEALTH CARE SERVICES 10 (prerequisite for dual credit medical courses) - included in fees. Students will prepare for medical, health, and wellness careers by examining the anatomy and function of the human body systems and the provision of community services related to their careers. Students will also develop first aid, CPR, and occupational safety skills needed for these careers. Students who wish to complete the optional First Aid certificate will need to cover the cost of the program for an extra \$150, completed outside the school schedule.

<b>PSYCHOLOGY 20/30/AP</b>	5 Credits	NO FEE
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The aim of this course is to provide you with a general background in psychology including the history of psychology and the principles of learning and thinking. You will learn about stress and aggression, the influence of small groups, the status of roles, and some insights regarding neurosis, psychosis, emotion, and behaviour. Students will study the parts of the brain and dissect an animal brain. This course concludes with a section about self-improvement and self-growth. Students should complete at least Psychology 20 before taking Dual Credit University Psychology.

<b>LINEAR ALGEBRA 25</b>	3 Credits	NO FEE
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Linear algebra is one of the areas of mathematics that is fundamental to success in computer science, engineering, and related fields. Typically introduced in the first year of University, this

course uses algebra in addition to computer algebra systems to establish basic concepts at a high school level. Topics include vectors, computer network design, Google's page rank algorithm, and more.

<b>MATH 20-2</b>	5 Credits	Online after school
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Students who earned less than 65% in Math 10C are strongly encouraged to take Math 20-2 before taking 20-1. Mathematics 20-2 students use proportional reasoning to solve real-life problems involving 2-D shapes and 3-D objects. They use the properties of angles and triangles, including the sine and cosine laws, to solve problems; use reasoning to prove conjectures; use spatial reasoning to solve puzzles; and solve problems that involve radicals. They interpret statistical data, solve problems involving quadratics and research and present a mathematical topic of their choice. Students who pass 20-2 can continue into 30-2 if they know that their post-secondary plans do not require Math 30-1 or students can take 20-1 and then 30-1.

<b>CAPSTONE AP SEMINAR &amp; RESEARCH</b>	5 Credits	NO FEE for course
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AP Capstone™ is a diploma program based on two year long AP courses: AP Seminar and AP Research. These courses are designed to complement other AP courses that the AP Capstone student may take. Instead of teaching specific subject knowledge, AP Seminar and AP Research use an interdisciplinary approach to develop the critical thinking, research, collaboration, time management, and presentation skills students need for college-level work. Both courses guide students through completing a research project, writing an academic paper, and making a presentation on their project. During the course of the two-year program, students are required to:

- Analyze topics through multiple lenses to construct meaning or gain understanding.
- Plan and conduct a study or investigation.
- Propose solutions to real-world problems.
- Plan and produce communication in various forms.
- Collaborate to solve a problem.
- Integrate, synthesize, and make cross-curricular connections.
- Write numerous, academic papers.

The College Board recognizes students who complete the Capstone program with one of two different awards, which are valued by post-secondary schools around the world.

- AP Capstone Certificate: Students who earn scores of 3 or higher in AP Seminar and AP Research receive the AP Capstone Certificate.
- AP Capstone Diploma: Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP exams of their choice receive the AP Capstone Diploma.

## **AP COURSES**

Advanced Placement courses provide enhanced content and assignments to prepare students to write the Advanced Placement standardized exams. Students may choose to take the course without writing the exam. AP content will help to prepare students for the content



in first-year university courses. Depending on enrollment, courses may be offered during the school day during options periods or after school.

<b>DUAL CREDIT COURSES</b>	5 Credits on diploma 3 Credits for university	SUPPLY FEE VARIES WITHDRAWAL FEE
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Courses may be used to meet the diploma requirements of “10 credits in any combination from Career and Technology Studies (CTS) courses” and “10 credits in any 30-level course – Advanced level (3000 series) in Career and Technology Studies courses.”

- BIO 1156: Wellness and Health Issues
  - No Prerequisite
- BIO 1160: Anatomy and Physiology I
  - Prerequisite: Science 10 and either Biology 20 or Health Care Services 10
- BIO 1167: Botany
  - Science 10; Biology 20 recommended
- BUS 1170: Introduction to Management
  - Prerequisite: Business 9 or 10
- BUS 1177: Entrepreneurship
  - Prerequisite: Business 9 or 10
- CAD 1160: Graphic Communications (AutoCAD)
  - Prerequisite: Computer Science 10
- CMM: The Principles of Animation
  - Prerequisite: Art 9; Co-requisite Art 10 recommended
- CSP 1150: Medical Terminology /Anatomy and Physiology
  - Prerequisite: Science 10 and either Biology 20 or Health Care Services 10
- ENG 1150: Composition
  - Prerequisite: 80% in English 20
- GEO 1166: Physical Geology
  - Prerequisite: Science 10
- LAW 1150: Environmental Law
  - Prerequisite: Law 10
- LAW 1177: Introduction to Procedural Law in Canada
  - Prerequisite: Law 10
- MTH 1150: Engineering Math I
  - Prerequisite: Math 30; Math 31 co-requisite recommended
- PSY 1160: Introduction to Psychology
  - Prerequisite: Psychology 20 and 80% in English 20
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