

## **Certificate in Innovation and Entrepreneurship: Core and Elective Courses**

Effective Beginning Academic Calendar Year 2023-24 (Beginning Fall Term 2023); Last Updated April 2023

Note: Courses on this list may be updated from time to time, please check our website for details. Updates to this list will be posted in April when course registrations open.

### **Core Courses - Choose at least one**

#### **School of Business**

- SEM 330 Exploring Innovation and Entrepreneurship
- SEM 345 Social Entrepreneurship
- SEM 431 New Venture Creation

#### **ALES**

- AN SC 479/499 Integrative Project in Animal Science/Animal Health Science
- AREC 323 Introduction to Management for Agri-Food, Environmental, and Forestry Business
- AREC 423 Advanced Management Methods & Application for Agri-Food, Fashion & Resource Bus.
- NUFS 425 Methods and Applications in Nutritional Product Development
- NUFS 450 Food Product Development

#### **Arts**

- HADVC 209 History of Modern Design
- DRAMA 259 Performer Created Theatre
- SOC 363 Sociology of Work and Industry

#### **Augustana**

- AUMGT 350 Entrepreneurship

#### **Engineering**

- ENGG 260 Innovation and Entrepreneurship with Engineers
- ENG M 402 Entrepreneurship and Project Management

#### **Native Studies**

- NS 330 Indigenous Economies

#### **Science**

- PHYS 495/595 Special Topics in Physics / Physics Innovation & Entrepreneurship

### **REQUIRED Final Integrative Project Course - Register after completing 9 credits of Core and Elective courses**

- SEM 331 Integrative Capstone in Innovation and Entrepreneurship

## **Elective Courses - Choose at least two**

### **School of Business**

- ACCTG 426 Management Control Systems
- ACCTG 463 Accounting for Natural Resources, Energy, and the Environment
- BTM 441 Managing Information Systems: A Senior Management Perspective
- BUEC 311 Business Economics, Organizations and Management
- BUEC 479 Government and Business in Canada
- FIN 422 Capital Investment
- MARK 301 Introduction to Marketing
- OM 468 Quantitative Management Consulting Project
- SEM 301 Organizational Behaviour
- SEM 321 Strategy, Management and Organizational Theory
- SEM 402 Leadership Skills
- SEM 412 Effective Negotiations
- SEM 488 Selected Topics in Organization Theory / Introduction to Indigenous Business
- B LAW 488 Selected Topics in Business Law / Entrepreneurship and Legal Principles

### **ALES**

- AREC 250 Social and Economic Issues of Food Biotechnology
- AREC 482 Cooperatives and Alternative Business Institutions
- HECOL 241 Fashion Industries
- HECOL 250 Design Studies and Practices
- HECOL 300 Policy Development and Evaluation
- HECOL 301 Program Planning and Evaluation
- HECOL 313 Family Dynamics
- HECOL 412 Family Challenges
- HECOL 440 Family Policy Issues
- HECOL 441 Textiles and Apparel in the Global Economy
- NUFS 100 Introduction to Food Science and Technology
- NUFS 200 Introduction to Functional Foods and Nutraceuticals
- NUFS 201 Physical Principles of Food Structure and Functionality
- NUFS 311 Introduction to Food Processing
- NUFS 361/363 Food Microbiology
- NUFS 401 Undergraduate Research Project
- NUFS 402 Brewing, Enology, and Food Fermentations
- NUFS 403 Processing of Milk and Dairy Products
- NUFS 406 Science and Technology of Cereal and Oilseed Processing
- NUFS 427 Food Safety
- NUFS 430 Principles of Sensory Evaluation of Foods
- NUFS 454 Unit Operations in Food Preservation
- NUFS 490 Innovations in Food Science
- PL SC 345 Plants for Bioproducts

## Arts

- ART 438 Practicum
- C LIT 210 Literature in the Digital Age
- C LIT 228 Literature, Popular Culture and the Visual Arts
- C LIT 450 World Literature and the Environment
- DES 586/7 Design Practicum
- DES 597 Design Management
- DES 483 Design Issues
- DR 240 Voice for Performance
- DR 331 Movement and Physical Theatre
- DR 427 Topics in Community Based and Applied Theatre
- ECON 281 Intermediate Microeconomic Theory I
- ECON 373 Industrial Organization
- ECON 399 Introductory Econometrics
- ECON 384 Intermediate Microeconomic Theory II
- ECON 421 International trade
- ECON 471 Strategic Behaviour of the Firm
- ECON 422 International Payments
- ECON 472 Market Power: Theory and Policy
- ECON 493 Economic Forecasting
- ECON 222 Technology, Institutions and Economic Growth
- ECON 451 Indigenous Economic Development
- ECON 251 Indigenous Economics
- ECON 467 Environmental and Natural Resource Policy
- ECON 404 Applied Economics Projects
- FREN 254 Introduction to Translation Theory and Practice: French-English-French
- FREN 311 Mystery, Myth, and Supernatural
- FREN 333 French Cultural Moments
- FREN 454 Translation: English into French
- FREN 479 Media and Society in France
- GERM 443 Advanced Translation: German into English
- GERM 444 Exercises in Translation: English into German
- HADVC 209 History of Modern Design
- HADVC 309 Sustainable Design
- LA ST 210 South America
- MLCS 210 Approaches to Cultural Studies
- MLCS 410 Capstone Course
- MST 350 Understanding Video Games (in person)
- MST 351 Understanding Video Games (remote)
- MUSIC 365 Topics in Ethnomusicology
- MUSIC 495 The Business of Music
- PHIL 366 Computers and Culture
- PHIL 385 Ethics and Artificial Intelligence
- PHIL 355 Environmental Ethics

- POLSH 407 Business Polish
- RUSS 443 Russian-English Translation
- SLAV 399 Early Ukrainian Canadian Culture
- SOC 203 Social Problems
- SOC 260 Inequality and Social Stratification
- SOC 269 Introductory Sociology of Globalization
- SOC 291 Introduction to Environmental Sociology
- SOC 302 Topics in Sociology (Anti-racism and Racial Injustice)
- SOC 302 Topics in Sociology (Media and Society)
- SOC 327 Criminal Justice Administration in Canada
- SOC 343 Social Movements
- SOC 366 People in Industry
- SOC 369 Sociology of Globalization
- SOC 370 Racism and Decolonization
- SOC 402 Topics in Sociology (Commons and Climate Justice)
- SOC 402 Topics in Sociology (Speed, Mobility, and Work)
- SOC 415 Applied Research Internship
- SOC 445 Cities and Suburbia
- SOC 456 Data Analysis and Research
- SOC 496 Human Rights in International Perspective
- SPAN 405 Exercises in Translation: Spanish into English
- SPAN 406 Exercises in Translation: English into Spanish
- SPAN 475 Spanish in Society
- UKR 300 Ukrainian through its Living Culture I
- UKR 306 Business Ukrainian
- UKR 400 Ukrainian through its Living Culture II
- WGS 102 Gender and Social Justice
- WGS 244 Critical Disability Studies
- WGS 250 Gender and Science
- WGS 390 Environmental Feminisms and Social justice
- WGS 310 Gender, Development, and Beyond
- WGS 360 Race, Class, and Gender

### **Augustana**

- AUACC 311 Introductory Accounting
- AUACC 322 Managerial Accounting
- AUART 331 Drawing III: Contemporary Ideas in Drawing
- AUART 371 Painting III: Contemporary Ideas in Painting
- AUART 411 Interdisciplinary Exploration: Studio
- AUCHE 341 Environmental Chemistry
- AUCSC 204 Computing Technology in Modern Society
- AUCSC 460 Artificial Intelligence
- AUDRA 239 Theatre Company
- AUDRA 250 Applied Improvisation

- AUDRA 350 Introduction to Directing
- AUECO 203 Intermediate Microeconomic Analysis I
- AUECO 254 India Tour
- AUECO 341 Environmental Economics
- AUECO 346 Agricultural Economics
- AUECO 356 China Tour: Experiencing Development and Change
- AUECO 360 International Economics
- AUECO 364 Development Economics
- AUENG 368 Ecofeminist Theory and Women's Writing
- AUENV 220 Applications in Sustainability
- AUENV 324 Resource and Environmental Management
- AUENV 327 Environmental Education and Heritage Interpretation
- AUIDS 230 Introduction to Gender and Women's Studies
- AUIDS 302 Exploring Body Issues
- AUMGT 310 Corporate Finance
- AUMGT 330 Introduction to Marketing
- AUMGT 345 Organizational Theory
- AUMGT 360 Hockey: Culture and Commerce
- AUMGT 370 Organizational Research Methods
- AUMUS 226 Music and the Moving Image
- AUMUS 235 Introduction to Conducting
- AUMUS 236 Introduction to Choral Techniques, Literature, and Interpretation
- AUMUS 250 Introduction to Music Education
- AUMUS 330 Music for Theatre
- AUMUS 356 Music and Wellness
- AUPED 317 Exercise in Special Populations
- AUPED 343 Training Methodologies and Athletic Performance
- AUPED 469 Sport and Canadian Popular Culture
- AUPHI 355 Philosophy and Environment
- AUPHI 390 Indigenous Thought: First Nations Thought and Knowledge
- AUPOL 328 Environmental Politics
- AUPOL 329 Popular Culture, Law and Politics
- AUPOL 355 Gender, Law, and Politics
- AUPSY 342 Health Psychology
- AUPSY 344 Environmental Psychology
- AUPSY 346 Community Psychology
- AUREL 263 Spirituality and Globalization
- AUREL 345 Religion and Ecology
- AUSOC 218 Sociology of Global and Development Issues
- AUSOC 222 Canadian Social Issues
- AUSOC 275 Sex, Gender, and Society
- AUSOC 341 Sociology of Food
- AUSOC 358 Environmental Sociology
- AUSOC 393 Political Sociology

## Education

- EDIT 486 - Interactive Multimedia
  - EDIT 488 - Online Teaching and Learning
  - EDCT 400 - Conference Seminar: Robotics & Learning: Constructionism in Practice
  - \*EDCT 400 - Conference Seminar\*
  - \*EDSE 401 - Conference Seminar\*
- \*Denotes a course that requires approval by an administrator. Registration inquiries for specific sections can be sent to [educ.info@ualberta.ca](mailto:educ.info@ualberta.ca) - please include the section of interest.\*

## Engineering

- ENG M 310 OR 401 Engineering Economics / Financial Management
  - ENG M 405 Engineering, Business and Society
  - ENG M 408 Manufacturing Systems and Engineering
  - ENG M 501 Production and Operations Management
  - ENG M 508 Energy Auditing and Management
  - ENG M 514 Reliability Engineering
  - ENG M 516 Maintenance Management
  - ENG M 530 Engineering Project Management
  - ENG M 540 Introduction to Optimization Models and Algorithms
  - ENGG 420 Engineering Law
  - ENGG 490 Engineering Leadership Lab
- NOTE: Certain courses may be restricted for registration. Engineering registration assistance requests may be sent to [enggui@ualberta.ca](mailto:enggui@ualberta.ca).

## Kinesiology, Sport & Recreation

- HEED 321 Psychological Dimensions of Health Promotion
- KIN 303 Psychology of Sport and Physical Activity
- KIN 311 Assessment of Fitness and Health
- KIN 335 Advanced Conditioning Methodology
- KIN 372 Neuroscience Consideration for Adapted Physical Activity
- KIN 403 The Application of Psychological Skills to Sport and Physical Activity
- KIN 440 Advanced Sports Injury Management
- KIN 444 Communication Skills and Strategies in Sport and Physical Activity
- KRLS 411 The Business of Hockey
- KRLS 421 Play Leadership
- RLS 331 Leisure Education

## **Native Studies**

- NS 115 Indigenous Peoples and Technoscience
- NS 345 Governance in Indigenous Nations
- NS 420 Partnership Strategies

## **Science**

- BIOL 298 Understanding Biological Research
- BIOL 299 Research Opportunity Program
- BIOL 398 Research Project
- BIOL 399 Research Project
- BIOL 498 Research Project
- BIOL 499 Research Project
- CHEM 299 Research Opportunity Program in Chemistry
- CHEM 399 Research Experience in Chemistry
- CHEM 401 Introduction to Chemical Research
- CHEM 403 Chemical Research
- CHEM 425 Separations and Mass Spectrometry
- CHEM 451 Chemical Biology
- CHEM 454 Bioconjugate Chemistry
- CHEM 405 Special Topics in Chemistry
- CMPUT 250 Computer and Games
- CMPUT 401 Software Process and Project Management
- CMPUT 404 Web Applications and Architecture
- CMPUT 414 Introduction to Multimedia Technology
- CMPUT 495 Honours Seminar
- CMPUT 469 Artificial Intelligence Capstone
- MATH 356 Introduction to Mathematical Finance I
- MATH 357 Introduction to Mathematical Finance II
- MATH 371 Mathematical Modelling in the Life Sciences
- MATH 372 Mathematical Modelling I
- MATH 408 Computational Finance
- PHYS 397 Projects in Experimental Physics
- STAT 371 Probability and Stochastic Processes
- STAT 378 Applied Regression Analysis
- STAT 479 Time Series Analysis