# Course Outline

## 1. COURSE INFORMATION

<table>
<thead>
<tr>
<th>Session Offered</th>
<th>Summer 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Name</td>
<td>Technological Entrepreneurship</td>
</tr>
<tr>
<td>Course Code</td>
<td>GEN TECH 3EN3E</td>
</tr>
<tr>
<td>Program Name</td>
<td>Civil Engineering Infrastructure Technology / Computing and Information Technology / Energy Engineering Technology / Manufacturing Engineering Technology</td>
</tr>
<tr>
<td>Calendar Description</td>
<td>The processes for bringing new technologies to market and reality through entrepreneurship and intrapreneurship.</td>
</tr>
<tr>
<td>Instructor</td>
<td>M. Piczak</td>
</tr>
<tr>
<td>E-Mail:</td>
<td>Avenue emailer &amp; keep emails within Avenue only (no others will be answered)</td>
</tr>
<tr>
<td>Office Hours &amp; Location</td>
<td>by appointment/skype</td>
</tr>
</tbody>
</table>

## 2. COURSE SPECIFIC

### Course Description
This course explores the ideas, mind set, thinking and techniques related to researching and starting up a new business, engineering or technological opportunity. Through a combination of lecture, field work, internet research, guest online lecturers, and video, students will assess the feasibility of an opportunity that could be pursued within (intrapreneurship) or outside (entrepreneurship) of organizational confines.

### Instruction Type

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Hours per term</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Classroom instruction</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Laboratory, workshop or fieldwork</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid term, final exam</td>
<td>6</td>
</tr>
<tr>
<td>DE</td>
<td>On Line</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Presentations on campus</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>39</td>
</tr>
</tbody>
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### Resources

<table>
<thead>
<tr>
<th>ISBN</th>
<th>Textbook Title &amp; Edition</th>
<th>Author &amp; Publisher</th>
</tr>
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</table>

### Other Supplies

Source

### Prerequisite(s)
None

### Corequisite(s)
None

### Antirequisite(s)
None

### Course Specific Policies
This course will be using a range of software. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.
It is expected that students read the material that is coming under discussion prior to class consistent with the ‘flipped classroom’ approach to teaching/learning.

All assignments submitted for evaluation are completely word processed. Assignments and projects come as WORD files unless otherwise specified so that track change comments can be provided. Presentations are done in PowerPoint when done online while Google Slides and Prezi are the presentation tools to be used when presenting face to face. Students are invited to actively participate during class sessions offering insight, comment, reinforcement, argument, contrary views and underscoring examples. Students are expected to participate in the discussion.

Most work done in this course is done in groups typical of industry and business practice. All students participate in group work where indicated. Group work is mandatory. No exceptions.

All students attend group presentations undertaking various. No attendance results in a zero for the assignment.

Where an individual does not make their contribution, the offending individual’s grade can be reapportioned to remaining group members subject to sufficient notice.

All groups are self chosen and limited to 6 in a group. Presentations are 12 minutes in length MAX and done live on campus using Prezi.

Students are invited to request a Collaborate online meeting room to be used for group meetings, presentation practice.

The business plan scope presentation online is 2 minutes in length, week 3 using PowerPoint.

Everything in this course is submitted to the Dropbox using WORD only. No other file formats are accepted. Marks will be docked for not respecting this instruction and other assignment/project related requirements.

There are no makeups for missed quizzes. Of the five quizzes offered, the best four will be considered for the final grade.

Additional tutorials can be scheduled at the students’ request.

Departmental Policies

Students must maintain a GPA of 3.5 on a 12 point scale to continue in the program.

In order to achieve the required learning objectives, on average, B.Tech. students can expect to do at least 3 hours of “out-of-class” work for every scheduled hour in class. “Out-of-class” work includes reading, research, assignments and preparation for tests and examinations.

Announcements made in class or placed on Avenue are considered to have been communicated to all students including those individuals not in class.

No accommodation will be made for students taking two courses on the same evening.
| Week 1: M4 | The Entrepreneur  
- Characteristics and behaviour of entrepreneurs  
- Role of entrepreneurship in Canada | Chapter 1 |
| Week 2: M11 | Start-up & the Need for Competitive Advantage  
- Finding ways and means of being better and different in the marketplace  
- Analyzing rather than describing the competition | Chapter 2 |
| Week 3: M18 | Developing an Effective Business Plan  
- Two minute Online Student Business Plan Scope Presentation Using PowerPoint  
- Contents of the classic business plan  
- Effective written presentation of most important parts of business plan  
- Conducting a SWOT  
- Business Model Canvas as planning tool | Chapter 5 |
| Week 4: M25 | Franchises and Buyouts  
- Franchise do’s and don’ts  
- Importance of doing research  
- Failed franchises: not everything succeeds | Chapter 4 |
| Week 5: J1 | Marketing Research and Product Strategy and Promotional & Pricing Strategies  
- Quantifying market size and anticipated share  
- Conducting defensible research | Chapters 6/7 |
| Week 6: J8 | Marketing Research and Product Strategy and Promotional & Pricing Strategies Continued  
The New Venture Team, Small Firm Management and Managing HR  
- The management plan  
- Tips for finding/developing the winning team | Chapter 6/7 |
| Week 7: J15 | Mid Term 2 hours: Chapters 1, 2, 4, 5, 6, 7, 9  
On Campus (Room TBD) | |
| Week 8: J22 | Financial Software Lecture  
- Using financial software for pro forma development  
- Presenting the financial plan | Financial software Danbridge case |
| Week 9: J29 | Forms of Ownership & Legal Issues/Selecting a Location and Planning the Facilities  
- Considering forms of ownership  
- Choosing a name, location | Chapters 10/11 |
| Week 10: Jl 6 | Operations Management & Control Systems  
- Obtaining clearances, permits, etc.  
- Licensing issues  
- Choosing corporate names  
- Home based business  
- Evaluating & Managing Financial Performance and Financing Requirements and Pro Forma Statements  
- Review of financial statements  
Sources of financing | Chapters 12/13/14 |
| --- | --- |
| Week 11: Jl13 | Project Night Presentations  
- 12 minutes MAX. using google slides or Prezi  
- Could be on campus live (TBD) | All WORD reports (2 – info mapping + full report) + Excel  
Financials to Dropbox;  
1 submission set/group ONLY |
| Week 12: Jl20 | Intrapreneurship and making the internal business case | Avenue resources |
| Week 13: Jl27 | Intrapreneurship continued  
- Entrepreneurship and Small Business as Four Letter words  
- Final Wrap Up/Review  
- Reflections on our educational journey | Avenue resources |
| August 3 | Classes end August 5  
Final Exam (2.5 hours)  
Place: TBD by Registrar Office | Comprehensive with emphasis on 2nd half Chpts. 1, 2, 5, 6, 7, 9, 10, 11, 12, 13, 14 + downloads |

**Sessional Dates Calendar:** [http://registrar.mcmaster.ca/registered/sessional.html](http://registrar.mcmaster.ca/registered/sessional.html)

**Final Examination Period:** Last class of term

Note that this structure represents a plan and is subject to adjustment term by term. The instructor and the University reserve the right to modify elements of the course during the term. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes.

Final examinations will be scheduled, conducted and invigilated by the Office of the Registrar during the fall and winter terms. Summer term final examinations are scheduled for the last class of term. All students entering the examination room must produce a McMaster photo identification card. No other identification will be accepted. In addition, for classes that allow you to use a calculator, you must use the “CASIO FX 991” during all tests and exams. The CASIO FX991 is the only calculator allowed in the exam rooms. No electronic devices permitted other than CASIO FX 991. You cannot enter the exam room 30 minutes after exam start. You are not permitted to leave until 45 minutes have elapsed. Final exams may not necessarily be on class night.

### 4. ASSESSMENT OF LEARNING

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>On Line Quizzes (5)</td>
<td>15%</td>
</tr>
<tr>
<td>Mid Term</td>
<td>20%</td>
</tr>
<tr>
<td>Assignment #1 (SWOT and Market Size/Anticipated Share)</td>
<td>10%</td>
</tr>
<tr>
<td>Assignment #2 (N/W Event in info mapping style)</td>
<td>10%</td>
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</tbody>
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Course results determined on a percentage scale will be converted to an official letter grade, as indicated in the Undergraduate Calendar. The results of all courses attempted will appear on your transcript as letter grades.

**Note that English/grammar will be evaluated as part of any written assignments and projects.**

Students must present themselves with validated ID for mid terms and finals. Students arriving without valid ID will be sent to ‘some office’ on campus to update ID. No extra time for examinations is provided.

### 5. LEARNING OUTCOMES

1. Explain the state of mind of the entrepreneur relative to employees/managers/bureaucrats.
2. Find ideas, solve problems and think entrepreneurially in business and engineering situations.
3. Adopt an intrapreneurial, opportunistic approach for ideas within the confines of an existing organization.
4. Conduct environmental scans and identify market size/anticipated share through internet research.
5. Conduct internet, non-traditional and field enquiry to pursue a business idea or opportunity.
6. Work effectively in groups and teams to achieve a stated goal.
7. Research, assemble and present a defensible, credible business idea packaged as a business case/plan.
8. Demonstrate effective communication (written and oral) skills using a selection of formats and software.

### 6. POLICIES

**Anti-Discrimination**

The Faculty of Engineering is concerned with ensuring an environment that is free of all discrimination. If there is a problem, individuals are reminded that they should contact the Department Chair, the Sexual Harassment Officer or the Human Rights Consultant, as soon as possible.


**Academic Integrity**

Attention is drawn to the Statement on Academic Ethics and the Senate Resolutions on Academic Dishonesty as found in the Senate Policy Statements distributed at registration and available in the Senate Office. Any student who infringes one of these resolutions will be treated according to the published policy.

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the University.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at: http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf

**Requests for Relief for Missed Academic Term Work (Assignments, Mid-Terms, etc.)**

The McMaster Student Absence Form is a self reporting tool for Undergraduate Students to report absences that last up to 5 days and provides the ability to request accommodation for any missed academic work. Please note this tool cannot be used during any final examination period.

You may submit a maximum of 1 Academic Work Missed requests per term. It is YOUR responsibility to follow up with your Instructor immediately regarding the nature of the accommodation.

If you are absent more than 5 days or exceed 1 request per term you MUST visit your Associate Dean's Office (Faculty Office). You may be required to provide supporting documentation.

This form should be filled out immediately when you are about to return to class after your absence.

http://www.mcmaster.ca/msaf/

**E-Learning Policy**

Consistent with the Bachelor of Technology’s policy to utilize e-learning as a complement to traditional classroom instruction, students are expected to obtain appropriate passwords and accounts to access Avenue To Learn for this course. Materials will be posted by class for student download. It is expected that students will avail themselves of these materials prior to class. Avenue can be accessed via http://avenue.mcmaster.ca
Communications

It is the student’s responsibility to:

- Maintain current contact information with the University, including address, phone numbers, and emergency contact information.
- Use the University provided e-mail address or maintain a valid forwarding e-mail address.
- Regularly check the official University communications channels. Official University communications are considered received if sent by postal mail, by fax, or by e-mail to the student’s designated primary e-mail account via their @mcmaster.ca alias.
- Accept that forwarded e-mails may be lost and that e-mail is considered received if sent via the student’s @mcmaster.ca alias.
- Check the McMaster/Avenue email and course websites on a regular basis during the term.

Turnitin (Optional)

This course will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com and in hard copy so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to http://www.mcmaster.ca/academicintegrity/

Protection of Privacy Act (FIPPA)

The Freedom of Privacy of Information and Protection of Privacy Act (FIPPA) applies to universities. Instructors should take care to protect student names, student numbers, grades and all other personal information at all times. For example, the submission and return of assignments and posting of grades must be done in a manner that ensures confidentiality.

http://www.mcmaster.ca/univsec/fippa/fippa.cfm

Academic Accommodation of Students with Disabilities Policy

Student Accessibility Services (SAS) is committed to the continuous improvement of accessibility for students with disabilities. Students are encouraged to contact SAS as early as possible before each term starts to become familiar with the services offered and to confirm their accommodations.

Students must forward a copy of the SAS accommodation to the instructor of each course and to the Program Administrator of the B.Tech. Program immediately upon receipt. If a student with a disability chooses NOT to take advantage of a SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. http://sas.mcmaster.ca

Student Code of Conduct

The Student Code of Conduct (SCC) exists to promote the safety and security of all the students in the McMaster community and to encourage respect for others, their property and the laws of the land. McMaster University is a community which values mutual respect for the rights, responsibilities, dignity and well-being of others. The purpose of the Student Code of Conduct is to outline accepted standards of behavior that are harmonious with the goals and the well-being of the University community, and to define the procedures to be followed when students fail to meet the accepted standards of behavior. All students have the responsibility to familiarize themselves with the University regulations and the conduct expected of them while studying at McMaster University.

http://judicialaffairs.mcmaster.ca/pdf/SCC.pdf