

## Course Outline

### 1. COURSE INFORMATION

<b>Session Offered</b>	Spring 2014	
<b>Course Name</b>	Legal and Regulatory Issues	
<b>Course Code</b>	GEN TECH 4EM3	
<b>Program Name</b>	Bachelor of Technology Partnership	
<b>Calendar Description</b>	This course introduces the student to various legal frameworks, regulatory requirements and international standards. Topics covered include ISO9000, ISO14000, and ISO18000 among others.	
<b>Instructor</b>	Mohamed Yusuf, B.Tech., M.Eng., MBA, P.Eng.	Phone: 519-591-6034 E-Mail: yusufi@mcmaster.ca Email: myusuf6040@gmail.com

### 2. COURSE SPECIFICS

<b>Course Description</b>	In the business world, companies focus on being as efficient as possible, keeping costs low, learning from mistakes, continually improving to distinguish themselves from their competition, while satisfying regulatory and statutory requirements and customers' needs. There are many popular tools, which, if implemented correctly, will help companies to run smoothly. Among these tools are the ISO standards. This course will introduce to the student the backgrounds and contents of the ISO standards 9000 (Quality Management Systems), 14000 (Environmental Management), and 18000 (Occupational Health and Safety).		
<b>Instruction Type</b>	<b>Code</b>	<b>Type</b>	<b>Hours per term</b>
	C	Classroom instruction	36
	L	Laboratory, workshop or fieldwork	
	T	Tutorial	
	DE	Distance education	
	<b>Total Hours</b>		36
<b>Resources</b>	<b>ISBN</b>	<b>Textbook Title &amp; Edition</b>	<b>Author &amp; Publisher</b>
		<ul style="list-style-type: none"> <li>• Understanding and Implementing ISO9000:2000, Second Edition</li> <li>• Management of Occupational Health &amp; Safety, Fourth Edition</li> </ul>	David L. Goetsch and Stanley B. Davis. Prentice Hall  Kevin Kelloway and Lori Francis. Nelson College Indigenous
	<b>Other Supplies</b>	<b>Source</b>	
<b>Prerequisite(s)</b>	Registration in one of Civil Engineering Infrastructure Technology, Energy Engineering Technologies, or Manufacturing Engineering Technology		

<b>Corequisite(s)</b>	None	
<b>Antirequisite(s)</b>	None	
<b>Course Specific Policies</b>	<p>This project and interactive oriented course introduces the student to various legal frameworks, regulatory requirements and international standards aimed at providing a quality driven, safe and environmentally friendly workplace. Upon successful completion of this course, student will have gained an expansion of their knowledge in the areas:</p> <ol style="list-style-type: none"> <li>1. Quality Management Systems standards ISO9000</li> <li>2. Environmental compliance and management ISO14000</li> <li>3. Occupational health and safety ISO18000</li> <li>4. Internal Auditing and problem solving</li> <li>5. Strategic sustainability initiatives</li> </ol>	
<b>Departmental Policies</b>	<p>Students must maintain a GPA of 3.5 on a 12 point scale to continue in the program.</p> <p>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.</p> <p>The use of cell phones, iPods, laptops and other personal electronic devices are prohibited from the classroom during the class time, unless the instructor makes an explicit exception.</p> <p>Announcements made in class or placed on Avenue are considered to have been communicated to all students including those not in class.</p>	
<b>3. SUB TOPIC(S)</b>		
Week 1 – May 5	<b>Introduction to Quality Management:</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Team Building Exercise</li> <li>• Total Quality Management (TQM)</li> <li>• Six-Sigma</li> <li>• ISO 9000</li> </ul>	Chapter 1
Week 2 – May 12	<b>Introduction to International Organization for Standardization:</b> <ul style="list-style-type: none"> <li>• Project Groups decided</li> <li>• ISO 9001, ISO 14000 and ISO 18000 standards</li> <li>• Who needs to be ISO certificated and why?</li> <li>• What is the benefit of having ISO certified?</li> <li>• What preparations need to be done before the certification?</li> <li>• Which areas/elements are applicable to you? Any exclusion?</li> <li>• How to develop ISO documents (manual, procedures and work instructions)</li> <li>• ISO certification process and time span</li> </ul>	Chapters 1, 5 & 7
Week 3 – May 26	<b>ISO 9001: essentials. (Element 4)</b>	Chapters 4 & 6

	<ul style="list-style-type: none"> <li>• Quiz</li> <li>• General requirements</li> <li>• Documentation requirements</li> <li>• Forms, tags, logs and record keeping</li> </ul>	
Week 4 – June 2	<b>ISO 9001: essentials. (Element 5)</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• Responsibility and authority.</li> <li>• How to interview Top Management</li> <li>• Business Plans and changes</li> </ul>	Chapter 4
Week 5 – June 9	<b>ISO 9001: essentials. (Element 6)</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• Resources and Training</li> <li>• Work environment control and Infrastructure</li> </ul>	Chapter 4
Week 6 – June 16	<b>ISO 9001: essentials. (Element 7)</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• Marketing/Sales, Customer Services, Design and Development, Purchasing, Production, Packaging, Receiving/Shipping, Storage, Lab and Calibration</li> <li>• How to develop process charts</li> <li>• Take home midterm given (Due on Monday June 23<sup>rd</sup> at 6:30pm)</li> </ul>	Chapters 2 & 4
Week 7 – June 23	<b>ISO 9001: essentials. (Element 8)</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• How to identify and report the non-conformities and resolve them in a timely manner</li> <li>• Product, process and system data monitoring</li> <li>• Data Analysis</li> <li>• Continual improvement projects, goals and results</li> <li>• Customer satisfaction</li> </ul>	Chapters 4 & 8
Week 8 – June 30	<b>ISO 9001: Internal auditing</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• Mandatory elements</li> </ul>	Chapter 7
Week 9 – July 7	<b>ISO14001:</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• The ISO14000 addresses various aspects of environment management system (EMS)</li> <li>• ISO14001:2004 - requirements for an EMS</li> <li>• ISO14004:2004 - general EMS guidelines</li> <li>• How ISO14000 works</li> <li>• EMS Guidelines</li> </ul>	Slides

Week 10 – July 14	<b>Occupational Health &amp; Safety (OH&amp;S):</b> <ul style="list-style-type: none"> <li>• Quiz</li> <li>• Introduction to OH&amp;S</li> <li>• Historical development of OH&amp;S</li> <li>• The important of OH&amp;S</li> <li>• Duties and responsibilities</li> <li>• Worker’s compensation</li> <li>• Psychosocial hazards</li> <li>• Workplace wellness</li> <li>• Accident</li> <li>• Accident investigation</li> <li>• Risk assessment</li> </ul>	Chapters 1,2, 3, 4, 12 & 13
Week 11 – July 21	<b>Project presentations</b>	
Week 12 – July 28	<b>Project presentations</b>	
Final Examination	Scheduled during the regular University Final Examination period established by the Registrar’s Office.	

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.

4. ASSESSMENT OF LEARNING	Weight
Quizzes/Assignments	20%
Class discussion contribution	10%
Term Test – Individual term paper	30%
Project – group project report	20%
Project – group project presentation	20%
<b>TOTAL</b>	<b>100%</b>

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.

### 5. LEARNING OUTCOMES

At the end of this course the student will reliably demonstrate the ability to:

1. Develop and document a Quality Management system (QMS) as well as an Environmental Management System (EMS)
2. Make preparation for ISO9000 registration
3. Write an effective Quality Policy and Quality Objectives
4. Create an effective Health & Safety program to promote employee health & wellness in the workplace
5. Perform internal audits
6. Self-perform in an individual project: to collect, analyze and organize information; to take responsibility for own actions; to manage time and other resources to attain goals
7. Interact and work in teams to develop new skills in: organizational and planning, persuasive communication, team building, group report writing and presentation
8. Create strategic sustainability initiatives

### 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.  
<http://www.mcmaster.ca/policy/General/HR/Anti-Discrimination%20policy.pdf>

### 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**

The Centre for Student Development is committed to the continuous improvement of accessibility for students with disabilities. Students are encouraged to contact CSD 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 CSD 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 CSD accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. <http://csd.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>