



Ontario Tech University acknowledges the lands and people of the Mississaugas of Scugog Island First Nation. We are thankful to be welcomed on these lands in friendship. The lands we are situated on are covered under the Williams Treaties and the traditional territory of the Mississaugas, a branch of the greater Anishinaabeg Nation, including Algonquin, Ojibway, Odawa and Pottawatomi. These lands remain home to a number of Indigenous nations and people.

We acknowledge this land out of respect for the Indigenous nations who have cared for Turtle Island, also called North America, from before the arrival of settler peoples until this day. Most importantly, we remember the history of these lands has been tainted by poor treatment and a lack of friendship with the First Nations who call them home.

This history is something we are all affected by as we are all treaty people in Canada. We all have a shared history to reflect on, and each of us is affected by this history in different ways. Our past defines our present, but if we move forward as friends and allies, then it does not have to define our future.

FACULTY OF BUSINESS AND IT

INFR 3120: Web & Script Programming

Course outline for Fall, 2025

1. Course Details & Important Dates*

Term	Course Type	Day	Time	Location	CRN#
Fall 2025	Lecture	Wednesday	6:40PM EST – 9:30PM EST	Online – Google Meet	40229
Fall 2025	Lecture	Thursday	11:10AM – 2:00PM EST	Online – Google Meet	45304
Fall 2025	Tutorial	Tuesday	2:10PM – 3:30PM EST	UP 1502	45135
Fall 2025	Tutorial	Tuesday	2:10PM – 3:30PM EST	SIR 3110	45132

Classes Start	Classes End	Last day to drop course without academic consequence	Final Exam Period
September 2, 2025	December 1, 2025	September 29, 2025	December 3 - 13, 2025

* Visit [Ontario Tech's Important Dates and Deadlines](#) for other dates.

2. Instructor Contact Information

Instructor Name	Office	Phone	Email
Sheikh Ahmed Munieb	UB-2018		Ahmed.sheikh@ontariotechu.net
Office Hours: TBA			

Laboratory/Teaching Assistant Name	Office	Phone	Email
TBA			
Office Hours:			

3. Course Description

Students learn the fundamental and start-of-the-art web development principles and techniques. This course is an introduction to web technologies, including HTML5, CSS3, JavaScript, JQuery, AngularJS, Node.js, Express, Ajax and MongoDB. Students learn how to develop web applications (both front-end and backend) from scratch according to W3C standards. Also, they will learn how to build functional dynamic web applications connected to databases.

4. Learning Outcomes

On the successful completion of the course, students will be able to:

- Understand the client/server model and other relevant models of web applications.
- Implement web pages according to W3C standards (HTML, CSS, and JavaScript)
- Design and develop web applications using state-of-the-art technologies such as AngularJS, Node.js, Express, Ajax, and MongoDB.
- Design data-driven web applications that integrate with Database technologies.
- Make an informed decision about appropriate development tools and programming languages for a given web development project.

5. Course Design

Students are expected to come prepared for each lecture. Students should expect to participate in class discussions. The instructor reserves the right to call upon individual students based on the class roster. The course lectures intend to teach the state-of-the-art concepts and technologies in web programming (see the detailed outlined below). The lectures will be supported with practical demos and examples that are designed or selected by the instructor for the IT students. The labs give opportunities to students to get more hands-on experience in web programming and prepare them for accomplishing their assignments and final projects.

Suggestions for Success: To be successful in this course, attend lectures, participate in lecture discussions, and complete lab activities before labs, complete assignments, and program every example given in the class lectures. Keep up with the material. Do not wait until the night before an exam to study. If you are having difficulty with the course material, make sure you come to my office hours or make an appointment. Your academic success is important to us, but you are eventually in control of that success. Be active in your education!

6. Outline of Topics in the Course

Lecture #	Date	Time	Time	Topics	Details of topics to be covered in the course, by unit or by week
1	3 rd / 4 th September 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	Introduction and HTML	
2	10 th / 11 th September 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	HTML5 & CSS3 - I	
3	17 th / 18 th September 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	HTML5 & CSS3 - II	
4	24 th / 25 th September 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	HTML5 & CSS3 - III	
5	1 st / 2 nd October 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	JavaScript Fundamentals – I	
6	8 th / 9 th October 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	JavaScript Fundamentals - II	
	October 13, 2025			Thanksgiving Day, no scheduled academic activities.	
STUDY BREAK	October 14 to 19, 2025			Study Break, no scheduled academic activities.	
7	22 nd / 23 rd October 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	Routing + Express	
8	29 th / 30 th October 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	CRUD with MongoDB-I	

9	5 th / 6 th November 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	CRUD with MongoDB-II	
10	12 th / 13 th November 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	Authentication-I	
11	19 th / 20 th November 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	Authentication-II	
12	26 th / 27 th November 2025	6:40PM EST – 9:30PM EST	11:10AM – 2:00PM EST	Angular	
STUDY BREAK	December 2, 2025			Study break, no scheduled academic activities.	

7. Required Texts/Readings

There is no mandatory textbook for this course. However, this course heavily uses the materials from free, online W3Schools, which is known to have very effective materials for teaching web programming. Also, other free online resources will be provided in advance for students to extend their knowledge on the relevant topics discussed in the course. Links to online resources will be posted on Canvas. Any sample code used during the class will also be made available for students online.

Additional readings may be assigned or recommended during the course.

8. Evaluation Method

The course final grade comes from 3 assignments, 2 in-class term tests, 4 Quizzes, 3 labs and final Project.

- Term Tests (2): (13 + 12) 25%
- Assignments (3): (8 + 8 + 14) 30%
- Tutorial Activities (3): 12%
- Quizzes (4): 12%
- Final Project: 21%

Final course grades may be adjusted to conform to program or Faculty grade distribution profiles. Further information on grading can be found under [Academic Regulations](#) in the University calendar.

9. Assignments and Tests

The tentative schedule and weight distributions of assignments and term tests are shown in the below.

Term Test 1 (13%)– Week-6
Term Test 2 (12%) – Week-8
Assignment 1 (8%) - Week-5
Assignment 2 (8%) – Week-9
Assignment 3 (14%) – Week-11
Tutorial Activity 1A and 1B (4%) – Week-1 & 2 (2% each week)
Tutorial Activity 2A and 2B (4%) – Week-7 & 9 (2% each week)
Tutorial Activity 3 (4%) – Week-10
Quiz 1 (3%) – Week-2
Quiz 2 (3%) – Week-3
Quiz 3 (3%) – Week-4
Quiz 4 (3%) – Week-5
Project Part-1 (7%) – Week-10
Project Part-2 (7%) – Week-12
Project Part-3 (7%) – First week of December

Missed In-term Examination

Students who miss an in-term examination such as a midterm or a term test may submit a request for consideration to the Faculty of Business and IT Advising Office and to the course instructor in writing using the Academic Consideration Form, along with supporting documentation. The request must be submitted within the deadlines specified in the [Procedures for Consideration of Missed In-Term Course Work and Examinations](#). If a midterm or term test is missed for approved reasons, the weight of the missed component will be added to the weight of the final exam/test-02, or a make-up test will be offered at a date set by the course instructor. If a student misses an in-term examination and does not follow the procedure above, they will receive a score of zero on the missed component.

All forms can also be found through MyOntarioTech or on the Ontario Tech University website.

Missed In-Term Course Work

A request for consideration for missed course work worth 20% or less of the final grade must be documented and reported to the instructor in writing within the deadlines specified in the Procedures for Consideration of Missed In-Term Course Work and Examinations. Course work includes, but is not limited to: quizzes, written assignments, participation, case studies, etc. If missed coursework totals more than 20% of the final grade, the request for consideration must be submitted to the Faculty of Business and IT Advising Office and to the course instructor in writing using the Academic Consideration Form, along with supporting documentation. The request must be submitted within the deadlines specified in the [Procedures for Consideration of Missed In-Term Course Work and Examinations](#). If approved, the instructor will contact you regarding a make-up assignment. If a student misses coursework and does not follow the procedure above, they will receive a score of zero on the missed component.

For information on how missed/late assignments and medical excuses are managed, please refer to the university's revised [Procedures for Consideration of Missed In-Term Course Work and Examinations](#).

10. Students with Disabilities

Ontario Tech University is committed to promoting an environment where everyone has an equal opportunity to contribute to their fullest potential. Students who require disability related accommodations are advised to contact [Student Accessibility Services](#) (SAS) as soon as possible to schedule a intake appointment. Accommodation decisions will be made in accordance with the Ontario Human Rights Code. Accommodations will be consistent with and supportive of the essential requirements of courses, labs and programs, and provided in a way that respects the

dignity of students with disabilities and encourages integration and equality of opportunity. Reasonable academic accommodation may require instructors to exercise creativity and flexibility in responding to the needs of students with disabilities while maintaining integrity.

Disability-related and accommodation support is available for students with mental health, physical, mobility, sensory, medical, cognitive, or learning challenges. Office hours are 8:30am-4:30pm, Monday to Friday. For more information on services provided, you can visit the [SAS website](#). Students may contact Student Accessibility Services by calling 905-721-3266, or email studentaccessibility@ontariotechu.ca.

Students who require the use of the Test Centre to write tests, midterms, or quizzes **MUST** be registered with Student Accessibility Services and must register online using the [SAS test/exam sign-up module](#). Students must sign up for tests, midterms, or quizzes **AT LEAST seven (7) working days before the date of the test**.

11. Technology Requirements and Learning Management System Information

Ontario Tech uses *Canvas*™ as its learning management system (LMS). Access to the LMS is limited to students formally registered in courses. That access is for the duration of the semester **and for an additional 120 days once the semester is over**. Students are strongly encouraged to download any/all relevant course material during that access period. Any requests for access post this period must be made in writing to the instructor/faculty member responsible for the course.

To support online learning, the university recommends [certain technology requirements](#) for laptops, software and internet connectivity. Each Faculty has its own requirement, please review yours [here](#).

Students experiencing technical difficulties such that they are unable to meet the technology requirements may contact the IT Service Help Desk at: servicedesk@dc-uoit.ca

Students experiencing financial difficulties such that they are unable to meet the technology requirements may contact Student Awards and Financial Aid Office at: connect@ontariotechu.ca

By remaining enrolled in this course, you acknowledge that you have read, understand and agree to observe the Recommended Technology Requirements for accessing university online learning resources, including those minimum requirements that are specific to your faculty and program.

12. Sensitive/Offensive Subject Matter

The classroom (both physical and virtual) is intended to provide a safe, open space for the critical and civil exchange of ideas and opinions. Some articles, media and other course materials may contain sensitive content that is offensive and/or disturbing. For example, some articles or videos may contain graphical depictions of violence, profanity, human anatomy, sexual acts, matters pertaining to race, gender, or sexuality. The Course Instructor will try to identify such material and communicate warnings to students in advance of the distribution and use of such materials, affording students the choice to either emotionally prepare for, or not to view or interact with, the content. Instructors should publish a warning statement in advance so as to give students adequate opportunity to make a choice to avoid any such matter. "The content you are about to view contains sensitive subject matter that may be considered offensive and/or disturbing to some viewers. By viewing and/or interacting with the content you acknowledge and agree that it is your decision to view and interact with the content and to take the risk that you will experience a negative emotional response or reaction to the nature of the content."

13. Student Support

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact studentlife@ontariotechu.ca for support. Furthermore, please notify your professor if you are comfortable in doing so. This will enable them to provide any resources and help that they can.

14. Student Sexual Violence Support and Education

Ontario Tech is committed to the prevention of sexual violence in all its forms. For any student who has experienced Sexual Violence, Ontario Tech can help. We will make accommodations to cater to the diverse backgrounds, cultures, and identities of students when dealing with individual cases.

If you think you have been subjected to or witnessed sexual violence:

- Reach out to the gender-based case specialist in the Human Rights office, a specially trained individual authorized to receive confidential disclosures about incidents of sexual violence. [The Human Rights Office](#) will make support services, including counselling, access or referrals to medical services, safety planning and accommodations, available to Students affected by an Incident of Sexual Violence. [Book a consultation](#) with the Case Specialist for more information.

15. Professional Suitability (if applicable)

Ontario Tech University is a community that values and promotes respect, integrity, diversity and accountability among all members of the university. These values can only be achieved in an environment that supports and protects the safety and security of its members. The Ontario Tech University Policy on Student Conduct defines and guides standards of student behaviour at the university to uphold these values and ensure that behaviour contrary to these standards are dealt with in a manner that is fair, open and effective.

The Faculty of Business & IT has the following expectations related to professionalism for all its community members, including, without limitation, students, staff, and faculty:

- **Respect, civility, and courtesy:** Community members are expected to treat each other with respect, civility, and courtesy both in and outside of the classroom. Rudeness, profanity, insults, harassment, and class disruptions are unacceptable.
- **Critique ideas, not the people who raise the ideas:** Discussions, debates, and the exchange of ideas are normal parts of life in an academic community. Community members are expected to engage in discussions, debates, and the exchange of ideas in respectful ways, even while vigorously advocating for one's perspective.
- **Talk to those with whom you have a complaint, not about them.** When community members have disputes, complaints, and/or concerns about another community member, they are expected to do their best to address the matter directly and informally with the other member, provided that it is safe to do so.
- **Special obligations:** Community members in positions of authority have special obligations to demonstrate respect, civility, and professionalism and to encourage the development of these values within the FBIT community.

Click on the respective titles for more information - The [Professional Suitability policy](#) and the [related procedures](#).

16. Academic Integrity

Students and faculty at Ontario Tech University share an important responsibility to maintain the integrity of the teaching and learning relationship. This relationship is characterized by honesty, fairness and mutual respect for the aim and principles of the pursuit of education. Academic misconduct impedes the activities of the university community and is punishable by appropriate disciplinary action.

Students are expected to be familiar with and abide by Ontario Tech University's regulations on Academic Conduct which sets out the kinds of actions that constitute academic misconduct, including plagiarism, copying or allowing one's own work to be copied, use of unauthorized aids in examinations and tests, submitting work prepared in collaboration with another student when such collaboration has not been authorized, among other academic offences. The regulations also describe the procedures for dealing with allegations, and the sanctions for any finding of academic misconduct, which can range from a resubmission of work to a failing grade to permanent expulsion from the university. A lack of familiarity with these regulations on academic conduct does not constitute a defense against its application. Please note that generative artificial intelligence (GAI) tools should not be utilized without advance, specific written approval by the faculty member teaching the course.

Click on the title for more information on [Academic Integrity](#).

Extra support services are available to all Ontario Tech University students in academic development, study skills, counseling, and peer mentorship. More information on student support services are provided by [Student Life](#).

17. Turnitin (if applicable)

Ontario Tech University and faculty members reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review by Turnitin.com. Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents. The instructor may require students to submit their assignments electronically to Turnitin.com or the instructor may submit questionable text on behalf of a student. The terms that apply to Ontario Tech University's use of the Turnitin.com service are described on the Turnitin.com website.

Students who do not wish to have their work submitted to Turnitin.com must provide their instructor a signed [Turnitin.com Assignment Cover sheet](#) when submitting an assignment.

18. Online Test and Exam Proctoring (Virtual Proctoring)

Ontario Tech University will conduct virtual monitoring of examinations in accordance with Ontario privacy legislation and all approved policy instruments.

19. Final Examinations (if applicable)

Final examinations are held during the final examination period at the end of the semester and may take place in a different room and on a different day from the regularly scheduled class. Check the published Examination Schedule for a complete list of days and times.

Students are required to show their valid physical or digital Ontario Tech University student photo ID card (campus ID), or a valid government issued photo ID that is in English when writing an **in-person examination**. Students are advised to obtain their [Student ID Card](#) well in advance of the examination period as they will not be able to write their examinations without it.

Students who are unable to write a final examination when scheduled due to religious publications may make arrangements to write a deferred examination. These students are required to submit an Academic Consideration form to the applicable Faculty as soon as possible and no later than three weeks prior to the first day of the final examination period.

Further information on final examinations can be found in the university's [Procedures for Final Examination Administration](#).

20. Freedom of Information and Protection of Privacy Act

The following is an important notice regarding the process for submitting course assignments, quizzes, and other evaluative material in your courses in the Faculty of Business and IT.

Ontario Tech University is governed by the Freedom of Information and Protection of Privacy Act ("FIPPA"). In addition to providing a mechanism for requesting records held by the university, this legislation also requires that the University not disclose the personal information of its students without their consent.

FIPPA's definition of "personal information" includes, among other things, documents that contain both your name and your Banner (student) ID. For example, this could include graded test papers or assignments. To ensure that your rights to privacy are protected, the Faculty of Business and IT encourages you to use only your Banner ID on assignments or test papers being submitted for grading. This policy is intended to prevent the inadvertent disclosure of your information where graded papers are returned to groups of students at the same time. If you still wish to write both your name and your Banner ID on your tests and assignments, please be advised that Ontario Tech University will interpret this as an implied consent to the disclosure of your personal information in the normal course of returning graded materials to students.

If you have any questions or concerns relating to the new policy or the issue of implied consent addressed above, please contact accessandprivacy@ontariotechu.ca

Notice of Collection and Use of Personal Information

Throughout this course, personal information may be collected through the use of [certain technologies](#) under the authority of the *University of Ontario Institute of Technology Act, SO 2002, c. 8, Sch. O.* and will be collected, protected, used, disclosed and retained in compliance with Ontario's *Freedom of Information and Protection of Privacy Act R.S.O. 1990, c. F.31*.

This course will use the following technologies that may collect, use, disclose and retain personal information (including images) for the purposes described below:

- Respondus Monitor and Proctortrack to maintain academic integrity for examinations;
- Google Meet and Kaltura Virtual Classroom to facilitate remote instruction and interactive learning;
- Peer-shared applications, services or technologies that may be reviewed, assessed, or used as part of coursework.
- Other applications, services, or technologies that support or enhance online learning.

Questions regarding personal information may be directed to: Ontario Tech University Access and Privacy Office, 2000 Simcoe Street North, Oshawa, ON L1G 0C5, email: accessandprivacy@ontariotechu.ca.

By remaining enrolled in this course, you acknowledge that you have read, understand, and agree to the terms and conditions under which the technology provider(s) may collect, use, disclose and

retain your personal information. You agree to the university using the technologies and using your personal information for the purposes described in this course outline.

21. Human Rights and Respect

Ontario Tech University is committed to providing a campus environment in which all University Members are treated with dignity and to fostering a climate of understanding and mutual respect. The University will not tolerate, ignore or condone Discrimination or Harassment by or against anyone. Examples of Harassing behavior include, but are not limited to; bullying, taunting or mocking someone's race or creed, ridiculing an individual's disability, or targeting individuals with unwanted sexual or negative stereotypical comments about one's sex, gender, sexual orientation, gender identity and/or gender expression. Pursuant to Ontario Tech's Respectful Campus Policy, students are reminded of their role in ensuring an equitable and inclusive learning environment. Requirements to refrain from harassment and discrimination apply broadly to on campus activities, e.g., on University property, in the classroom, including in lectures, labs and practicums, and also apply to off-campus activities, e.g. during any organized Ontario Tech class or extra-curricular activity including experiential learning opportunities such as co-op, practicum or during research endeavors, during official Ontario Tech events or using University equipment and technological tools that facilitate remote learning, e.g., class and other chat functions, video conferencing, and electronic mail.

22. Freedom of Expression

Pursuant to Ontario Tech's Freedom of Expression Policy, all students are encouraged to express ideas and perspectives freely and respectfully in university space and in the online university environment, subject to certain limitations. Students are reminded that the limits on Freedom of Expression include speech or behaviour that: is illegal or interferes with the university's legal obligations; defames an individual or group; constitutes a threat, harassment or discrimination; is a breach of fiduciary, contractual, privacy or confidentiality obligations or commitments; and unduly disrupts and interferes with the functioning of the university. In the context of working online, different forms of communication are used. Where permitted, students using "chat" functions or other online forms of communication are encouraged to ensure that their communication complies with the Freedom of Expression Policy.

23. Copyright Notice

All Teaching Materials, as they are defined under Ontario Tech's Intellectual Property policy ("IP Policy"), provided by the instructor throughout the course, including, but not limited to, in whole or in part, course notes, teaching notes, custom books, tutorials, evaluation tools, presentations and examinations are subject to the Copyright Act, R.S.C., 1985, c. C-42 and the IP Policy. Subject to the IP Policy, Teaching Materials are owned by the faculty member, instructor or other third party who creates such works, with a license to the University. The copyright owner(s) reserves all intellectual property rights in and to the foregoing materials. Consistent with the IP Policy, Teaching Materials are intended to be used by Ontario Tech University students registered in the course that is the subject of this course outline for educational purposes only. Any distribution or publishing of this material (e.g., uploading material to a third-party website) by a student is strictly prohibited under the law unless the student has obtained the copyright owner's prior written consent. Any violation of copyright law or the IP Policy, if proven, may be subject to sanction as academic misconduct, and/or under the Student Conduct Policy.

24. Student Course Feedback Surveys

Student evaluation of teaching is a highly valued and helpful mechanism for monitoring the quality of Ontario Tech University's programs and instructional effectiveness. To that end, course evaluations are administered by an external company in an online, anonymous process during the

last few weeks of classes. Students are encouraged to participate actively in this process and will be notified of the dates. Notifications about course evaluations will be sent via e-mail, and posted on Canvas, Weekly News, and signage around the campus.

25.AODA

The Accessibility for Ontarians with Disabilities Act (AODA) standards have been considered in the development of this model course template and it adheres to the principles outlined in the University's Accessibility Policy.