

## 2.2 User's Manual



### 2.2.1 Brief Overview

Lotus is a web application that provides students with the possibility of generating their university class schedules based on their availabilities. Besides generating the best possible schedules, students can register for courses offered by Concordia University's Engineering and Computer Science department. This web application allows students to modify their schedules as needed with ease.

### 2.2.2 Home Page

The home page can be accessed at <http://52.11.49.193>. Even if a user is not logged in, they can still view basic information about Lotus. However, clicking on "Academic Record", "Schedule" or "Workshop" will prompt the user with an error claiming they must log in to access these pages. This can be achieved by clicking the "Log in" tab. The home page is designed as a landing page, allowing users to learn more about the web application, the courses offered by Concordia's Engineering program as well as the required prerequisites in order to register for these courses. When a user is logged in, they have access to the other tabs. Academic Record provides the user with information pertaining to their Concordia Account. Schedule will redirect them to their current semester schedule, and Workshop will allow them to provide constraints and begin building their multi-year university schedule. The home page can be accessed at any time by clicking the lotus logo in the top left corner.

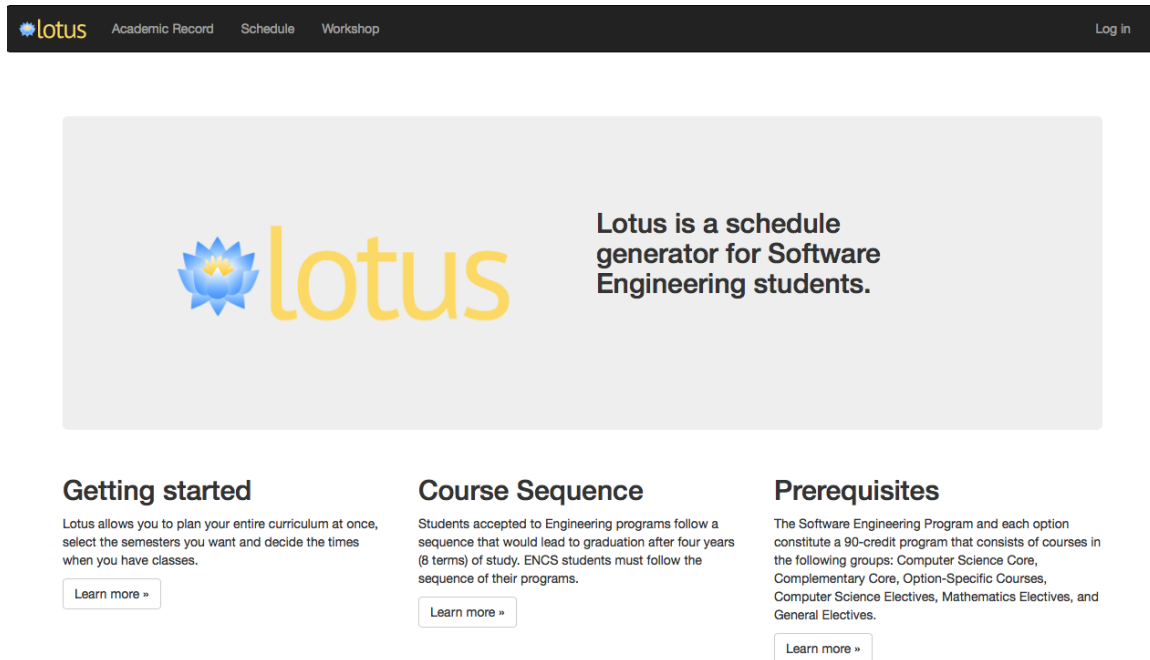


Figure 1: Home Page

### 2.2.3 Login Screen

The login page can be directly accessed at <http://52.11.49.193/login/> or through the Home Page by clicking the “Log in” button at the top right corner. In order for a user to log in, their username (email) and password are required for authentication. This will provide them with access to the Lotus website.

Figure 2: Login Screen

### 2.2.4 View Academic Record

A user can view their Academic Record by clicking the “Academic Record” tab as shown in Figure 3.

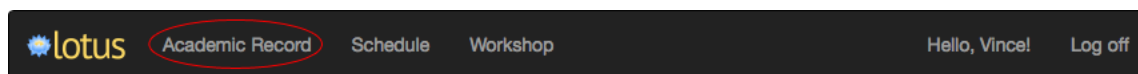
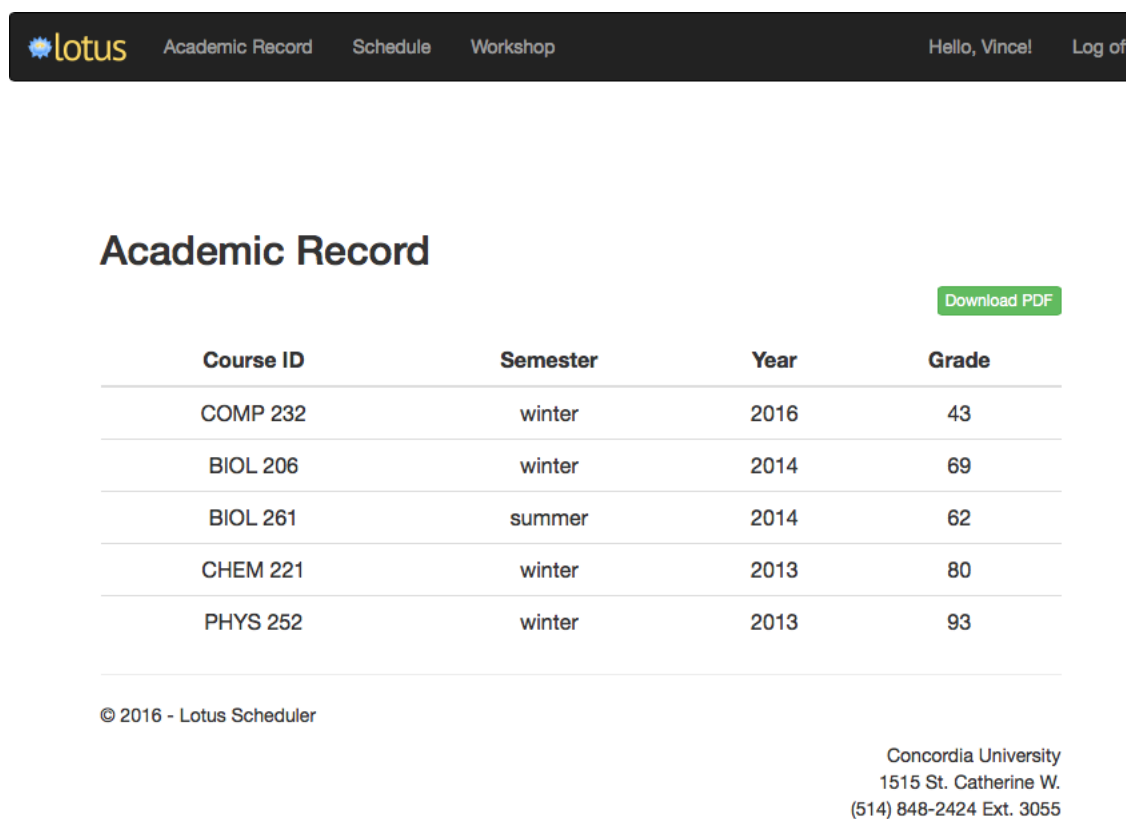


Figure 3: Academic Record Tab

A record of all completed courses will be displayed in a table, which includes the Course IDs of these courses. Also, included is the semester and year in which the student completed the course, and their grade as shown in Figure 4.



Course ID	Semester	Year	Grade
COMP 232	winter	2016	43
BIOL 206	winter	2014	69
BIOL 261	summer	2014	62
CHEM 221	winter	2013	80
PHYS 252	winter	2013	93

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Figure 4: Academic Record

By clicking on the green “Download PDF” button in Figure 4, Lotus will generate their Academic Record in a formatted PDF for printing or storing to the local device. The PDF is shown below in Figure 5.

Student Name: Lasalle, Vince

Student ID: 10001011

E-mail: vLasalle@gmail.com

Finished Courses:

COMP 232 - winter, 2016 - Grade: 43

BIOL 206 - winter, 2014 - Grade: 69

BIOL 261 - summer, 2014 - Grade: 62

CHEM 221 - winter, 2013 - Grade: 80

PHYS 252 - winter, 2013 - Grade: 93

Figure 5: Generated PDF of User's Unofficial Transcript

### 2.2.5 View Schedule

To access the student's schedule, click the "Schedule" tab in the navigation bar or visit <http://52.11.49.193/schedule/> while logged in. When active, the user is requested to select a semester and a year. This corresponds to which semester they would like to view. Once selected, the student can view their schedule for the semester. The student may request to view any of their semesters that contain registered courses.

Fall, 2016

Semester

Fall

Year

2016

View

Search

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8:00					ENGR 201 (tu)		
9:00					Artur De Matos Alves (TBA, ECEA)		
10:00			COMP 248 (lec)		COMP 248 (lec)		
11:00			Aiman Latif Hanna (TBA, U)		Aiman Latif Hanna (TBA, U)		
12:00					COMP 248 (tu)		

Figure 6: Viewing a Semester Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8:00					ENGR 201 (tu)		
9:00					Artur De Matos Alves (TBA, ECEA)		
10:00			COMP 248 (lec)		COMP 248 (lec)		
11:00			Aiman Latif Hanna (TBA, U)		Aiman Latif Hanna (TBA, U)		
12:00					COMP 248 (tu)		
13:00			COMP 248 (lab)				
14:00			Aiman Latif Hanna (TBA, UJ-X)				
15:00		ENGR 213 (lec)		ENGR 213 (lec)			

Figure 7: Representation of Fall 2016 Semester Schedule

### 2.2.6 Workshop

The workshop is responsible for generating schedules, selecting constraints and adding courses. When the workshop is active, a selection for semester and year are required in order to generate the schedule. By selecting the semester and year and clicking “view”, the workshop will generate a list of suggested courses that should be taken during the selected semester. Additionally, time constraints are available to customize the schedules to a further extent. The main constraints are checked off by default as it is up to the user to define which they do not require. Once the suggested courses are generated, and the constraints are checked off, the user must click the “Generate”, which will redirect them to “Schedule”. Their newly generated schedule will be displayed and authorization to register for the courses will be requested by the application. Approving the schedule will complete the procedure.

lotus Academic Record Schedule Workshop Hello, Vince! Log off

## Workshop

Semester Year

Fall 2016 View

Suggested sequence for Fall 2016:

COMP 248 Add

ENGR 201 Add

ENGR 213 Add

Days of Week: ☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

Classes: ☒ Morning ☒ Afternoon ☒ Evening ☒ Summer Classes ☒ Split Lectures

Location: ☒ Sir George Williams (Downtown) ☐ Online

Generate

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Figure 8: Workshop – Schedule Generator with Constraints

### 2.2.7 Register for a Course

Registering for a course can be done in two ways. The first way is directly through the “Schedule” tab. Clicking the blue “search” button in Figure 9 will display all courses available to the student. Clicking on the course itself will present the user with a description of the course, the prerequisites required, the number of credits and the course’s capacity. Clicking the “Add” button beside the course will prompt the user with a pop up shown in Figure 10. This method provides the user with an option of manually registering for a course by selecting the lecture, tutorial and/or lab sections. The necessary information (time, days, professor) is included below the section ID.

The screenshot shows the Lotus Academic Record interface. At the top is a navigation bar with the Lotus logo, links for Academic Record, Schedule, and Workshop, and a user greeting 'Hello, Vince!' with a 'Log off' link. Below the navigation bar, the page is titled 'Fall, 2016'. To the right of the title are two dropdown menus for 'Semester' (set to 'Fall') and 'Year' (set to '2016'), followed by a green 'View' button. On the left, there is a blue 'Search' button. The main content area displays a list of available courses, each with a course ID, credits, and an 'Add' button. The courses listed are: COMP 232 (Credits: 3.0), COMP 248 (Credits: 3.5), ENGR 201 (Credits: 1.5), ENGR 213 (Credits: 3.0), ENGR 233 (Credits: 3.0), and SOEN 228 (Credits: 4.0). The COMP 248 entry is expanded, showing a detailed description: 'COMP 248 Object\_Oriented Programming\_I (3.5\_credits) Prerequisite: MATH 204 or Cegep Mathematics 105 or NYC previously or concurrently. Introduction to programming. Basic data types, variables, expressions, assignments, control flow. Classes, objects, methods. Information hiding, public vs. private visibility, data abstraction and encapsulation. References. Arrays. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: one hour per week. Capacity: 50'.

Semester	Year	Action
Fall	2016	View

Search

Course ID	Credits	Action
COMP 232	3.0	Add
COMP 248	3.5	Add
COMP 248 Object_Oriented Programming_I (3.5_credits) Prerequisite: MATH 204 or Cegep Mathematics 105 or NYC previously or concurrently. Introduction to programming. Basic data types, variables, expressions, assignments, control flow. Classes, objects, methods. Information hiding, public vs. private visibility, data abstraction and encapsulation. References. Arrays. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: one hour per week. Capacity: 50		
ENGR 201	1.5	Add
ENGR 213	3.0	Add
ENGR 233	3.0	Add
SOEN 228	4.0	Add

Figure 9: Search Available Courses

Add course manually (COMP 248)

Lectures	Tutorials	Labs
<input checked="" type="radio"/> <b>U</b> Prof: Aiman Latif Hanna WED 10:15 a.m. - 11:30 a.m. FRI 10:15 a.m. - 11:30 a.m.	<input type="radio"/> <b>U UA</b> FRI 11:45 a.m. - 1:25 p.m.	<input type="radio"/> <b>UI-X</b> FRI 1:35 p.m. - 2:35 p.m.
<input type="radio"/> <b>W</b> Prof: Aiman Latif Hanna WED 1:35 p.m. - 2:35 p.m. WED 11:45 a.m. - 1 p.m.	<input checked="" type="radio"/> <b>U UB</b> WED 11:45 a.m. - 1:25 p.m.	<input checked="" type="radio"/> <b>UJ-X</b> WED 1:35 p.m. - 2:35 p.m.
	<input type="radio"/> <b>W WA</b> MON 10:15 a.m. - 11:50 a.m.	<input type="radio"/> <b>UK-X</b> FRI 1:35 p.m. - 2:35 p.m.
	<input type="radio"/> <b>W WB</b> WED 2:45 p.m. - 4:25 p.m.	<input type="radio"/> <b>WI-X</b> MON noon - 1 p.m.
	<input type="radio"/> <b>W WC</b> WED 2:45 p.m. - 4:25 p.m.	<input type="radio"/> <b>WJ-X</b> FRI 4:35 p.m. - 5:35 p.m.

Cancel Submit

Figure 10: Manually Add Courses By Section

The student can register a course by inputting their constraints in the “Workshop” tab and generating the best possible schedule. Once generated, the student will have the option to approve or deny the schedule. In the former case, the courses will automatically be registered, however denying a schedule will result in the workshop generating another one.

### 2.2.8 View Profile

The user profile can be viewed within any page by clicking the “Hello, <username>!” tab at the top right corner of the page, right beside the “Log off” tab.

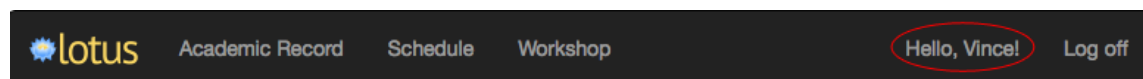


Figure 11: Accessing User Profile

Once the user is on their profile page, they are presented with the current local date and time, their Identification (ID) and E-mail. The user may change their current E-mail address and/or password at any time. To complete this procedure, the yellow “Change” button or the red “Change” button must be clicked in order to change their email, or password, respectively.



## Profile

April 2, 2016, 2:41 p.m.

**Lasalle, Vince**

ID	10001011
E-mail	vLasalle@gmail.com <a href="#">Change</a>
Password	***** <a href="#">Change</a>

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Figure 12: Profile Page

In order to change the email address, the user must provide a new email address and confirm their action by providing their password.

### Change your e-mail

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**New Email Address:**

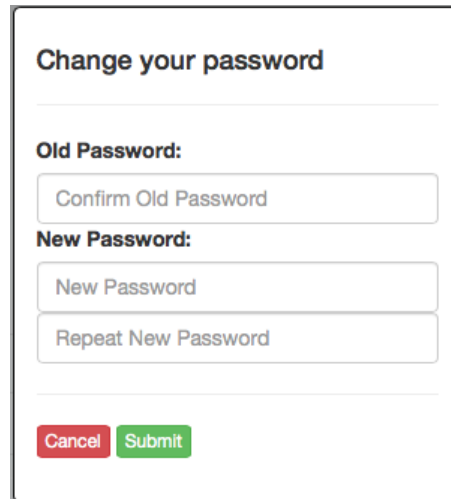
**Password:**

---

[Cancel](#) [Submit](#)

Figure 13: Change E-mail Popup

To change their password, their old password will be requested as well as their new password. The new password will be asked to be repeated and must match in order to successfully change it.



A screenshot of a 'Change your password' popup form. The form has a title 'Change your password' at the top. Below the title, there are two sections: 'Old Password:' and 'New Password:'. The 'Old Password:' section contains a single text input field labeled 'Confirm Old Password'. The 'New Password:' section contains two text input fields, one labeled 'New Password' and another labeled 'Repeat New Password'. At the bottom of the form, there are two buttons: a red 'Cancel' button and a green 'Submit' button.

Figure 14: Change Password Popup

### 2.2.9 Log off

The “Log off” tab, located in the upper right corner of any active page, allows the user to successfully log out of Lotus by ending their session and redirecting them back to the Home Page.

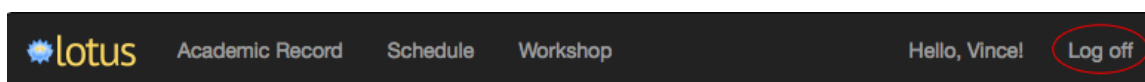


Figure 15: Log off Tab

### 2.2.10 Admin Access

The admin page can be accessed by visiting <http://52.11.49.193/admin/>. By providing the proper admin login credentials, admins can modify many elements as shown in Figure 16. The admin can add and remove courses/sections and prerequisites as well as register and unregister students from their courses. Student accounts can be created directly from this page. Any administrator has access to this page, provided they have given the proper permissions.

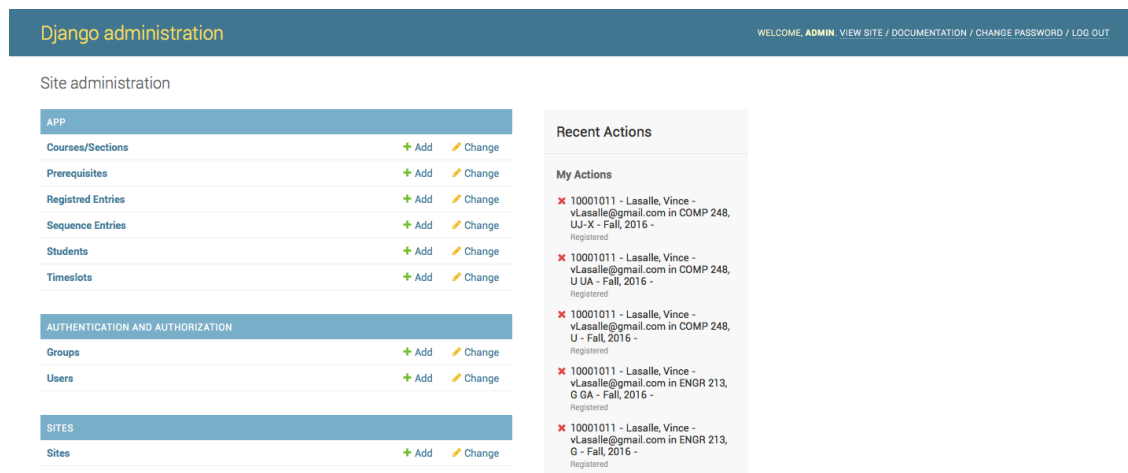


Figure 16: Admin Page