**Script:**

Chapter 2

**Objectives:**

- Define OMSCS Specializations
- Which Specialization to choose?

**Reference:**

http://www.omscs.gatech.edu/program-info/specializations

[Overview]

Hello, in this chapter, we are going to tell you all about the Specializations available in OMSCS. We will define what a Specializations is, how to complete a Specialization, and which Specialization you may want to choose, based on your background and preferences.

[Introduction]

OMSCS allows you to choose a specialization in order to further customize your education. A specialization is essentially a defined list of classes that is geared towards a common topic. For instance, the Computing Systems Specialization includes classes pertaining to Networks, Operating Systems, and Security. You must pass three core classes and three elective classes from the Computing Systems list in order to complete this Specialization.

A specialization must be declared before or at the same time that you apply for graduation. Specializations are declared via Buzzport on the DegreeWorks web page.

[Listing Specializations]

As of Fall 2016, OMSCS offers four different specializations:

- Computational Perception & Robotics
- Computing Systems

- Interactive Intelligence
- And Machine Learning

There are more specializations offered in the on-campus Masters in Computer science program, which currently offers 11 specializations. However, over time, more specializations from the on-campus program will be migrated into OMSCS.

[Choosing a Specialization]

Which specialization should you choose? Well, to answer that, you should also ask yourself, which area of Computer Science are you most interested in?

You should definitely choose a Specialization that suits your interests; maybe even one that would help to further your career aspirations. For instance, would you like to be a Machine Learning Engineer? If so, then the Machine Learning Specialization is probably your best choice. Or, if you are interested in artificial intelligence and robotics, you should look into the Computational Perception & Robotics specialization.

[A closer look into Specializations]

When deciding on a specialization, you should pay very close attention to the classes that are required to complete it. For example, here we have the Interactive Intelligence specialization. [show screenshot of OMSCS II page]. This specialization requires the completion of 3 core classes and 2 elective classes from this list.

Similarly, Here are the classes required for the Computational Perception and Robotics specialization.  [ SCREENSHOT ]

Here is the Machine Learning specialization.  [ SCREENSHOT ]

And finally the Computing Systems specialization. [ SCREENSHOT ]

As you can see, within each specialization, the required classes are divided into two categories: core classes and elective classes. Students must pass a number of classes from each category to complete the Specialization.

[About the courses]

Notice that on this specialization page, only the classes that are in bold are offered to OMSCS students. The classes not listed in bold are only available to the on-campus students.  As of Fall 2016, there are several elective classes that are not yet available to online students. Over time, however, more classes will be made available online. Check the OMSCS Future Courses page for more details. Please note, courses may be added or removed from this list in the future.

Finally, you may check the Unofficial OMSCS course reviews on individual classes within the specializations to say what your fellow OMSCS classmates have been saying about your classes.

[Choosing Classes]

Here's an example of how you might choose your classes if you decide to pursue Interactive Intelligence as your specialization.

Interactive Intelligence requires you to complete 3 core courses and 2 elective courses. Then, you will need 5 additional courses to graduate, for a total of 10 courses. It is NOT required that you take the core courses or the elective courses first - you may take these 10 courses in any order.

Let's look at the core classes for Interactive Intelligence: as of Fall 2016, you have to choose a course from the list labeled "Algorithms and Design", and then 2 courses from the next list of classes. From the first list, you might choose CS 6300 Software Development Process, because you want to learn more about the Software Development Lifecycle, and from the second list, since you like AI, you might choose CS 7637 Knowledge-Based AI, and CS 6601 Artificial Intelligence.

Moving on to the electives, since there are only 2 classes available to OMSCS at this time, you will have to choose CS 6440, Introduction to health Informatics and CS 6460 Education Technology. Again, more courses will be offered online in the near future.

[The remaining 5 classes]

So far, we have chosen 3 core courses and 2 elective courses, which is required for the Interactive Intelligence specialization. For the remaining 5 courses, you may take virtually any course that is open to OMSCS students, whether they are part of your chosen specialization or not.

[When to choose specialization]

You don't need to choose a specialization right away. If you have a change of heart about a given specialization, you can always change your mind later. However you must pass the requirements of one specialization, and declare it by the time you apply to graduate. You must apply to graduate one semester before your actual graduation. Remember, you have 6 years to graduate, which is plenty of time. So if you want to, you can just take courses that interest you and choose a specialization at a later time.

[Multiple specializations]

Can you declare multiple specializations? This is a commonly asked question from students in the OMSCS program. There is actually nothing to stop you from fulfilling the requirements of MULTIPLE specializations. However, you can declare ONE specialization and only one will be recognized at the time of graduation.

[Conclusion]

In this chapter, we defined what a specialization is, how to choose a specialization, and we recommended a strategy to choose the required classes. Planning is key to choosing the right specialization - think about which specialization looks most interesting to you, go to the specialization page, look at the list of classes, check out the course reviews, and finally, choose

and write down the courses you will need to complete the specialization. Thank you for watching.