DATA SCIENCE FREQUENTLY ASKED QUESTIONS FOR UNDERGRADUATE PROGRAM

Q: What is the proper sequence of courses for the Data Science BS?
 A: We have constructed a tracking sheet that shows the required courses. It can be found here (https://www.wpi.edu/student-experience/resources/academic-advising/program-tracking-sheets).

2. Q: May I take DS 2010 concurrently with MA 2612, even though it's recommended that MA 2612 be a background prerequisite?

A: Yes

3. **Q:** If I take a 3000-level course from the Business category, do I also have to complete a 2000-level course in Business to satisfy the *three* 2000-requirements for the DS minor?

A: The three 2000-level class requirements are "2000 and above", so a 3000-level Business course can be taken to meet this requirement. However, there is also an explicit requirement for a "3000 and above" course that would require an additional 3000-level course to meet the required number of courses.

4. Q: Does DS 1010 count towards the "Any approved DS course from the list" for the DS minor?

A: Yes

5. **Q:** What courses fulfill the Data Privacy and Ethics Requirements?

A: These are the valid course to complete the requirement: CS 3043, GOV 2313, GOV 2314, GOV 2315, GOV 2320 PY 2713, PY/RE 2731 and RBE 3100

6. Q: Can I apply Credit for AP Statistics I toward my degree in place of MA2611?

A: Yes

7. Q: What requirements can I fulfill using a credit from AP Computer Science A?

A: This can be used towards your free elective requirements.

8. Q: Do DS courses count towards Engineering and Science for the CS undergraduate requirements?

A: No, DS courses cannot be counted towards Engineering and Science credit.

9. **Q:** I am majoring in Computer Science and minoring in Business with only two more courses to take and no more free electives. To see if I like Data Science and I want to try a 1000-level course.

Would it count as a Basic Science course for the science requirement?

A: Similar to question 8, no.

10. Q: Can you substitute DS 3001 as credit for DS 2010?

A: No. On the other hand, DS3001 can be counted as credit for DS3010.

* Please check the notes at the end.

11. Q: Can I use DS 3010 in place of DS 3001 to fulfill my Data science minor requirements?

A · Vac

* Please check the notes at the end.

- 12. **Q:** If I change my major from Computer Science to Data Science will I still be able to graduate on time?
 - **A:** Depending on the required classes remaining, there is flexibility to allow this possibility.
- 13. **Q:** Is the level of difficulty of DS3010 comparable or similar to DS3001? Or are the materials taught in both classes similar?
 - **A:** Yes, they are comparable, and you can take either one.
 - * Please check the notes at the end.
- 14. **Q:** Are there any restrictions to doubling up with the Data Science B.S., especially with double-counting classes?
 - A: There are no restrictions and the DS double major may be taken as any other double major.
- 15. **Q:** I am currently a CS student pursuing a minor in DS, but Data Science is what I want to follow as a career path. I am already a junior, is it feasible for me to switch from CS to DS? Could I double major while this opportunity is available to me?
 - **A:** Please look at the double major sheet, which can be found at: https://www.wpi.edu/sites/default/files/inline-image/dual%20major%20tracking%20sheet.pdf. If you still have questions, you should check with your advisor.
- 16. Q: What majors go well with a Data Science major?
 - **A:** There are many majors that go well with Data Science including Computer Science, Mathematics, and Business. Other combinations that work well include Biology, Health Science, Engineering, and Chemistry. In fact, Data Science is an interdisciplinary program that has a significant role to play in many other fields and there are many combinations of majors that would work great, depending on the interest of the students.
- 17. Q: Can the two Social Science courses under the WPI general requirements and the DS specific privacy social science requirement be fulfilled by one and the same course?

 A: The DS specific privacy course could fulfill one of the Social Sciences courses, but not both.
- 18. **Q:** What is the difference between Computer Science and Data Science in terms of classes and requirements?
 - **A:** Requirements are similar in both majors and a number of courses overlap between the two majors. Data Science involves statistics, computer science and business, while Computer Science covers operating systems, programming languages, graphics, and theory. Computer Science more strictly focuses on programming and development.
- 19. **Q:** Do you apply to the Data Science program while applying to WPI or do you declare your major in your freshman year?
 - **A:** Applicants to WPI can indicate on their application what major they want to be in. Once a student is accepted or has started taking classes, they can change their mind and transition to another major.
- 20. Q: Can someone receive their BS/MS in 5 years or even less?
 - **A:** Yes, with the full leverage of the max double-counted credits, the typical length of the BS/MS program is 5 years. Further, some students with early planning and some course overloading during the junior and senior years can fulfill the BS/MS requirements in 4.5 years.
- 21. **Q:** Does WPI offer internships?

A: The Career Development Center provides two large Career Fairs each year. Students are encouraged to attend and meet industry or company personnel for internship and job opportunities at that time. WPI also encourages students to look for Co-Op options. Most students will also pursue internships or a job based on their work done on their MQP (Major Qualifying Project). Further questions on internships and Co-Op's can be directed to our Career Development Center. https://www.wpi.edu/offices/career-development-center

22. Q: What is the Data Science Graduate Qualifying Project?

A: On campus, the Graduate Qualifying Project is called a GQP. This is the graduate capstone project and a requirement for students to complete the MS degree. In a GQP, a graduate student is a part of a team of 3-5 students that address problems given to the team by a sponsored company. WPI has roughly 60-70 companies that have sponsored GQPs. These projects usually last for one full semester. Details can be found at:

https://www.wpi.edu/academics/departments/data-science/graduate-qualifying-project

23. **Q:** What is the WPI MQP?

A: The MQP or Major Qualifying Project is the capstone requirement for all undergraduate students for their graduation. MQP is worth one full unit or three 1/3-unit classes. MQP's are a team-based, professional-level design or research experience. Details can be found at:

https://www.wpi.edu/academics/undergraduate/major-qualifying-project

Please note that for double major students the MQP is worth 4/3 units or four 1/3 unit classes. If your MQP is not interdisciplinary with DS, you may have to complete two different MQPs. Please consult with your academic advisor for clarification.

24. Q: Are there any project opportunities to work with students in other majors?
A: WPI's IQP (Interactive Qualifying Project) gives every WPI student the experience of working in interdisciplinary teams to solve a problem or need that lies at the intersection of science and society. Most students complete their IQP during their junior year. In addition, large portions of MQP projects are also interdisciplinary and such interdisciplinary MQP projects are highly encouraged.

Notes:

- (a) Students who have already started a minor in Data Science prior to Fall 2020 can still use the old requirements to complete their minor.
- (b) DS 3001 is no longer being offered. Students should take DS 3010 in place of DS 3001; as DS 3010 replaces the DS 3001 requirement.