DATA SCIENCE, B.S. TO ARTIFICIAL INTELLIGENCE, M.S. ACCELERATED PROGRAM

Saint Louis University's data science B.S. to artificial intelligence M.S. accelerated program allows a student to complete both the Bachelor of Science in Data Science and the Master of Science in Artificial Intelligence at Saint Louis University in a shorter time period than if both degrees were pursued independently.

For additional information see the catalog entries for the following programs:

Data Science, B.S.
Artificial Intelligence, M.S.

Requirements

Students who want to apply to this accelerated program should have completed all 2000-level coursework required of the data science bachelor’s program and have completed at least 75 credits at the time of application.

At the time of application, students must have a cumulative GPA of at least 3.00 and a GPA of at least 3.00 in their computer science coursework. Contact the graduate coordinator for more details.

Continuation Standards

Students must maintain a cumulative GPA of at least 3.00 and a GPA of at least 3.00 in their computer science coursework.

Students who drop below that GPA while in the accelerated program will be placed on a one-semester probationary period before being dismissed from the accelerated program.

Only grades of "B" or better in the graduate courses taken while an undergraduate can be applied to the master's degree.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
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<tr>
<td>CSCI 1070</td>
<td>Introduction to Computer Science: Taming Big Data</td>
<td>3</td>
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<tr>
<td>MATH 1660</td>
<td>Discrete Mathematics</td>
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<tr>
<td>MATH 1510</td>
<td>Calculus I (satisfies CORE 3200)</td>
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<tr>
<td>CORE 1000</td>
<td>Ignite First Year Seminar</td>
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<tr>
<th>Course</th>
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<tr>
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<tr>
<td>CSCI 2100</td>
<td>Data Structures</td>
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<tr>
<td>MATH 2530</td>
<td>Calculus III</td>
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<tr>
<td>CORE 1200</td>
<td>Eloquenta Perfecta 2: Oral and Visual Communication</td>
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</tr>
<tr>
<td>CORE 1700</td>
<td>Ultimate Questions: Philosophy</td>
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| Spring   |                                                  |         |
| STAT 3850 | Foundation of Statistics                        | 3       |
| DATA 2800 | Data Science Practicum II                       | 1       |
| CSCI 2300 | Object-Oriented Software Design                 | 3       |
| MATH 3110 | Linear Algebra for Engineers                    | 3       |
| CORE 2500 | Cura Personalis 2: Self in Contemplation        | 0       |
| CORE 3800 | Ways of Thinking: Natural and Applied Sciences  | 3       |
| General Electives |                                    | 3       |

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<thead>
<tr>
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<tbody>
<tr>
<td>Year Three</td>
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<tr>
<td>Fall</td>
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<tr>
<td>CSCI 3710</td>
<td>Databases</td>
<td>3</td>
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<tr>
<td>STAT 4880</td>
<td>Bayesian Statistics and Statistical Computing</td>
<td>3</td>
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<tr>
<td>CORE 2800</td>
<td>Eloquenta Perfecta 3: Creative Expression</td>
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<tr>
<td>CORE 3400</td>
<td>Ways of Thinking: Aesthetics, History, and Culture</td>
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<tr>
<td>General Electives</td>
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<thead>
<tr>
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<tr>
<td>Year Four</td>
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<tr>
<td>Fall</td>
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<tr>
<td>CSCI 4961</td>
<td>Capstone Project I</td>
<td>2</td>
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<tr>
<td>CSCI 5740</td>
<td>Introduction to Artificial Intelligence (Only counts toward graduate degree)</td>
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| Credits |         |         |
### Year Four

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<tr>
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<tr>
<td>CSCI 5750</td>
<td>Introduction to Machine Learning</td>
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<td>General Electives</td>
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**Spring**

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<tr>
<td>DATA 4962</td>
<td>Capstone Project II</td>
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<tr>
<td>CSCI 5850</td>
<td>High-Performance Computing (Double-counted undergrad/grad)</td>
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<tr>
<td>STAT 5xxx Elective (Double-counted undergrad/grad)</td>
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### Year Five

**Fall**

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<tbody>
<tr>
<td>CSCI 5030</td>
<td>Principles of Software Development</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 5050</td>
<td>Computing and Society (See program notes)</td>
<td>3</td>
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<tr>
<td>Artificial Intelligence Applications Course</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
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**Spring**

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSCI 5961</td>
<td>Artificial Intelligence Capstone Project</td>
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<tr>
<td>Artificial Intelligence Elective</td>
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<td><strong>Credits</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
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### Program Notes

CSCI 5050 Computing and Society (3 cr) requirement will be waived for students who took Computer Ethics as an undergraduate; these hours would become an additional graduate elective.

### Thesis Option

A master's thesis is optional. Students completing a thesis should take six credits of Thesis Research Thesis Research (CSCI 5990) as part of the elective requirements.

### Internship with Industry

Students may apply at most three credits of Internship with Industry (CSCI 5910) toward the degree requirements.

### Closely Related Disciplines

With approval, students may include up to six credits of elective graduate coursework in closely related disciplines (e.g. mathematics and statistics, bioinformatics and computational biology, electrical and computer engineering).