

# Spatial Data Science & Technology (SDS)

## Major Requirements

48 credits

The SDS major requires a minimum of 48 credits, drawing on courses in Geography and Computer Information Science. The major requires 4 compulsory courses (16 credits) that will provide foundational skills, concepts, and critical thinking abilities. An additional 8 elective courses (32 credits) are required. Upon declaring the SDST major, students will meet with the Geography Undergraduate Coordinator/Advisor to tailor a series of elective courses best suited to individual student needs and employment aspirations.

- At least 36 credits used for the major must be taken for a letter grade.
- A grade of C- or better AND a GPA of 2.25 or better is required in courses used for the major.
- At least 24 credits must be upper-division (300 or 400-level)

Email the Undergraduate Advisor, Dr. Leslie McLees, at [geogadvr@uoregon.edu](mailto:geogadvr@uoregon.edu) with any questions. You can make an advising appointment at <https://geography.uoregon.edu/undergrad/advising/>. For more information on the program and opportunities, and to see the complete list of courses that fulfill the categories below, visit <https://geography.uoregon.edu/undergrad/>.

### 1. Core Courses (16 credits)

*These courses will provide foundational skills, concepts, and critical thinking abilities. Some of the introductory courses, such as GEOG 481, are pre-requisites for more advanced courses. Students are not required to complete these before moving to elective courses (except where pre-requisites are required).*

Course #	Title	Term
GEOG 181	Our Digital Earth	_____
GEOG 281	The World and Big Data	_____
GEOG 481	GIScience I	_____
CIS 122	Intro to Programming and Problem solving	_____

### 2. Elective courses (32 credits)

Rather than adopting a series of specializations, the electives component will remain flexible. Students should meet with the Undergraduate Advisor upon declaring the SDST major to work out a series of courses that best fit student needs and employment aspirations. The full list of elective courses can be found on the back of this page and on the SDST website on the Geography website: [geography.uoregon.edu/sdst](http://geography.uoregon.edu/sdst)

Professional objective(s) \_\_\_\_\_

	Course #	Title	Term
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____
8	_____	_____	_____

## List of elective courses

<b>Course #</b>	<b>Title</b>
GEOG 403	Research Practicum
GEOG 482	GIScience II
GEOG 485	Remote Sensing
GEOG 486	Remote Sensing II
GEOG 490	Special Topics in GIScience*
GEOG 491	Advanced GIS & Python
GEOG 493	Advanced Cartography
GEOG 494	Spatial Analysis
GEOG 495	Geographic Data Analysis
GEOG 497	Qualitative Methods
GEOG 498	Geospatial Project Design
CIS 210	Computer Science I
CIS 211	Computer Science II
GEOG	300 or 400 level course not listed above**
CIS	400 level course not listed above**

\* Special Topics includes courses that will be offered less frequently, but will also qualify for credit when offered under the course number GEOG 490. This may include courses such as: Web Mapping, Drones and Mapping, Machine Learning, or Environment and Society Mapping. As long as the title of the course changes, GEOG 490 can be repeated.

\*\* GEOG courses below 481 are NOT automatically counted for this major. In some cases, we may allow them if they are a field you wish to specialize in. In addition, while some CIS electives may count for this major, not all are appropriate. You MUST consult the SDS advisor to see if courses not on this list can count as an SDS elective.

Notes (next steps, gen-ed progress, potential courses and/or schedule, courses needed): \_\_\_\_\_

---

---

---

---

---

---

---

---