

Program Change Request

Date Submitted: 02/06/25 11:26 am

Viewing: : **Geology, BS/Earth Systems Science, Accelerated MS**

Last approved: 03/04/22 9:13 am

Last edit: 02/07/25 8:53 am

Changes proposed by: jbazaz

Catalog Pages Using this Program

- [Earth Systems Science, MS \(AOES\)](#)
- [Geology, BS](#)
- [Earth Systems Science, MS \(GGS\)](#)

Are you completing this form on someone else's behalf?
No

Effective Catalog: 2025-2026

Program Level: Undergraduate & Graduate (BAMs)

Program Type: Bachelor's/Accelerated Master's

Title:
Geology, BS/Earth Systems Science, Accelerated MS

Registrar's Office Use Only – Program Start Term

Registrar/OAPI Use Only – SACSCOC Status

Concentration(s):

College/School: College of Science

Department / Academic Unit: Atmospheric, Oceanic, & Earth Sciences

Jointly Owned Program? Yes

Participating Colleges

In Workflow

1. Registrar-Programs:Workflow Review
2. GGS Chair
3. AOES Chair
4. SC Curriculum Committee
5. AOES Curriculum Committee
6. SC Assistant Dean
7. Assoc Provost-Graduate
8. Assoc Provost-Undergraduate
9. Registrar-Programs

Approval Path

1. 02/07/25 10:00 am Deborah Mcgarrah (dmcgarra): Approved for Registrar-Programs:Workflow Review
2. 02/19/25 1:05 pm Nathan Burtch (nburtch): Approved for GGS Chair
3. 02/19/25 1:51 pm Mark Uhen (muhen): Approved for AOES Chair

History

1. Dec 21, 2020 by Jennifer Bazaz Gettys (jbazaz)
2. Mar 4, 2022 by Jennifer Bazaz Gettys (jbazaz)

	College
1	College of Science

Participating Departments

	Department
1	Atmospheric, Oceanic, & Earth Sciences
2	Geography & Geoinformation Science

Justification

What: Removing requirement for "immediate" graduate coursework to begin.

For reserve graduate credit, specifying that 12 credits is the maximum counted toward both the UG and GR degrees.

Overall- aligning this wording with other COS's other BAMs.

Why: As this program aligns with the university's BAM requirements, we're removing some duplicative language, the links provided direct students to university-level policies.

Catalog Published Information

Accelerated
Description/Dual
Degree
Description:

Geology, BS/Earth Systems Science, Accelerated MS

Overview

Geology, and Earth sciences more broadly, are extremely important to society and our economy as they deal with our planet, our oceans, and our climate. Degrees in Earth science are broadly useful in industry, government, conservation, and many other areas of our economy. While there are many positions in the field that only require a bachelor's degree, many employers either prefer a master's ~~Master's~~ degree, or a master's ~~Master's~~ degree can be the key to further promotion within a particular organization. This accelerated master's ~~Accelerated Master's~~ degree is designed to give students the skills and the degrees that they need to be both initially successful, and to ensure long-term advancement in their chosen professions.

Students are eligible to apply for this accelerated program once they have earned at least 60 undergraduate credits and can enroll in up to 18 credits of graduate coursework after successfully completing 75 undergraduate credits.

This flexibility makes it possible for students to complete a bachelor's and a master's in five years.

For more detailed information, see AP.6.7 Bachelor's/Accelerated Master's Degrees. For policies governing all graduate degrees, see AP.6 Graduate Policies. For more information on undergraduates enrolling in graduate courses, see AP.1.4.4 Graduate Course Enrollment by Undergraduates.

Application Requirements

Applicants should be enrolled in the Geology, BS degree at Mason and have earned at least 60 credits. Previous coursework should include two semesters each of calculus, chemistry, and physics, and one semester of statistics. Applicants should have a minimum GPA of 3.00.

Applicants to all graduate programs at George Mason University must meet the admission standards and application requirements for graduate study as specified in the Graduate Admission Policies section of this catalog. This includes:

1. Three letters of recommendation (at least one from a former professor or someone with a PhD).
2. A recent resume, a statement of interest/research goals (including information on the applicant's proposed MS research), and
3. A letter from their advisor. This letter should state that the advisor agrees to take on the candidate as an MS student, addresses how the candidate would be a good fit for them, and indicate why the applicant's research topic would be suitable for study.

GRE scores are not required for students in this accelerated program.

Important application information and processes for this accelerated master's program can be found here.

~~Applicants to all graduate programs at Mason must meet the admission standards and application requirements for graduate study as specified in the Graduate Admission Policies section of this catalog, excluding the GRE exam requirement (which is not required for those enrolled in the accelerated program). This includes three letters of recommendation (at least one from a former professor or someone with a PhD), a recent resume, a statement of interest/research goals (including information on the applicant's proposed MS research), and a letter from their advisor. This letter should state that the advisor agrees to take on the candidate as an MS student, addresses how the candidate would be a good fit for them, and indicate why the applicant's research topic would be suitable for study.~~

Accelerated Option Requirements

After the completion of 75 undergraduate credits, students may complete 3 to 12 credits of graduate coursework that can apply to both the undergraduate and graduate degrees.

In addition to applying to graduate from the undergraduate program, students in the accelerated program must submit a bachelor's/accelerated master's transition form (available from the Office of the University Registrar) to the College of Science's Office of Academic and Student Affairs by the last day to add classes of their final undergraduate semester.

Students must maintain an overall GPA of 3.00 or higher in all graduate coursework and should consult with their faculty advisor to coordinate their academic goals.

~~Students admitted to this program may take graduate courses after completing 75 undergraduate credits, and up to 12 credits of appropriate graduate coursework may be used in partial satisfaction of the requirements for the undergraduate degree. If students earn at least a 3.00 GPA in these classes, they are granted advanced standing in the master's program and must then complete an additional 24 credits to receive the master's degree. All other requirements for the Earth Systems Science, MS, must be met.~~

~~To apply these credits to the master's degree, students must request that the credits be moved from the undergraduate degree to the graduate degree using the Bachelor's/Accelerated Master's Transition form found on the Office of the University Registrar's website:~~

~~For more detailed information, see AP.6.7 Bachelor's/Accelerated Master's Degrees. For policies governing all graduate programs, see AP.6 Graduate Policies.~~

Reserve Graduate Credit

Accelerated master's students may also take up to 6 graduate credits as reserve graduate credits. These credits do not apply to the undergraduate degree, but will reduce the master's degree by up to 6 credits. With the maximum 12 graduate credits counted toward the undergraduate and graduate degrees plus the maximum 6 reserve graduate credits, the credits necessary for the graduate degree can be reduced by up to 18.

~~Undergraduate students may also take up to 6 additional and appropriate graduate credits as reserve graduate credit. These credits do not apply to the undergraduate degree, but will reduce the subsequent master's degree credits accordingly (e.g., with 12 credits counted toward the undergraduate and graduate degrees plus the maximum 6 reserve credits for the master's, an MS could be completed with 12 post-bachelor's credits). The ability to take courses for reserve graduate credit is available to all high achieving undergraduates with the permission of the department.~~

Graduate Course Suggestions

The following list of suggested courses is provided for general reference. To ensure an efficient route to graduation and post-graduation readiness, students are strongly encouraged to meet with an advisor before registering for graduate-level courses.

~~Students should consult with an advisor before registering for graduate credits.~~

GEOL 504	Sedimentary Geology	4
GEOL 506	Soil Science	3
GEOL 510	Advanced Structural Geology	3
GEOL 513	Hydrogeology	3
GEOL 521	Geology of Energy Resources	3
GEOL 532	Paleoclimatology	3
GEOL 534	Vertebrate Paleontology	4
GEOL 536	Paleontology Seminar	1-2
GEOL 541	Great Events in Earth History	3
GEOL 553	Field Mapping Techniques	3

Program Outcomes

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Additional Attachments

Reviewer Comments

Additional Comments

Is this course required of all students in this degree program?

%wi_required.eshtml%

Key: 865