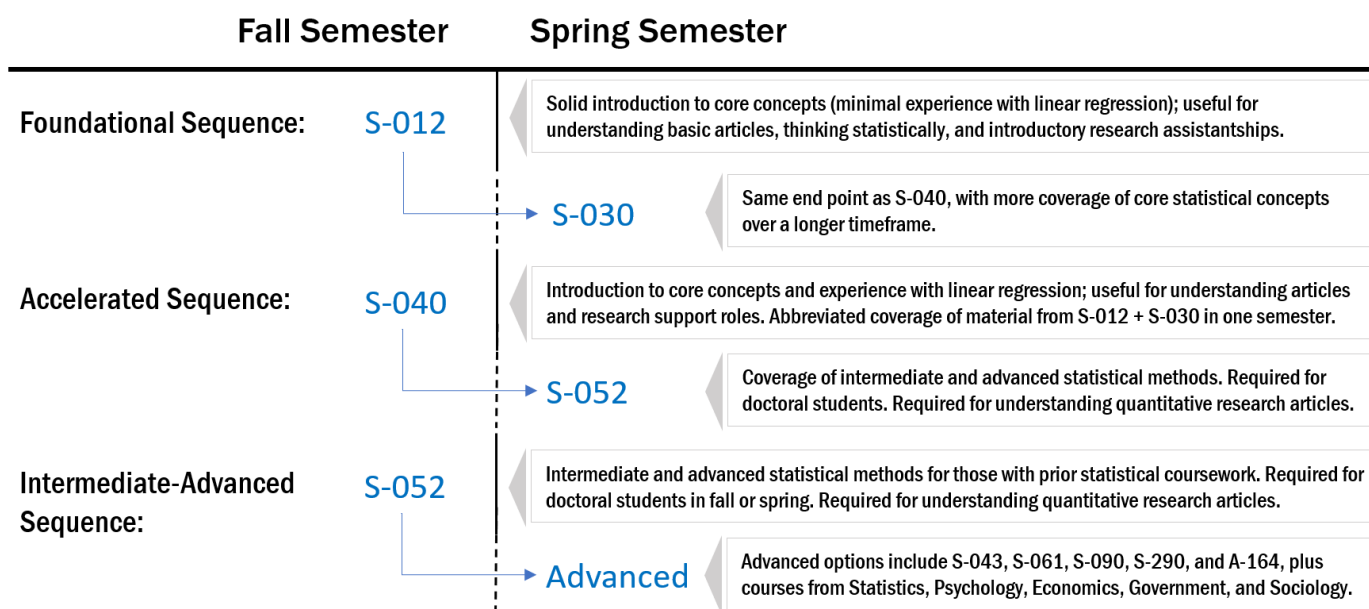


## Quantitative Methods Course Pathways for HGSE Ed.M. Students: Is S-012, S-040, or S-052 right for me this fall?

The education profession increasingly requires its practitioners to design, conduct, and use analyses of quantitative data. At HGSE, Ed.M. students have three well-known, year-long sequences in applied data analysis that provide this training. The foundational sequence is S-012→S-030; the accelerated sequence is S-040→S-052; and the intermediate sequence begins with S-052 in the fall. Graduates of these sequences have become educational practitioners, leaders, and scholars, all fluent in the practice and presentation of educational statistics. Although all sequences have a similar approach—using real-world data to answer real-world questions—their starting points, pace, and content differ. Thus, one of the most frequent questions that faculty advisers and fellow students hear every August is, “Is S-012, S-040, or S-052 right for me?” Here, we ask and answer some additional questions to inform this decision.



### Questions to help guide your decision-making process (our answers are below):

- 1) Do you have prior coursework and/or experience with statistics and data analysis?
- 2) Do you want to begin a quantitative data analytic role immediately upon graduation?
- 3) Do you want to enroll in additional coursework in the spring that recommends or requires S-012, S-040, or S-052?
- 4) How much time will you have to dedicate to the work?
- 5) Do you need a first-year doctoral sequence in applied quantitative research methods?
- 6) Do you wonder whether you are a “math person” or a “numbers person” or ask, “Is any of this right for me?”
- 7) Where can I go for more advice?

#### 1) Do you have prior coursework and/or experience with statistics and data analysis?

Both S-012 and S-040 welcome all students regardless of prior background with statistics and data analysis. S-052 welcomes students who have had at least one semester of applied multiple regression analysis. See the FAQ on page 10 of the S-052 syllabus [here](#) for more. Students who take S-040 in the fall may continue on to take S-052 as a natural follow-up course in the spring.

## **2) Do you want to begin a quantitative data analytic role immediately upon graduation?**

All three courses prepare students for data analytic positions, though at differing levels of technical expertise. The S-012/S-030 sequence and S-040 on its own prepares students to make valuable contributions to a quantitative research team, though some analysis-heavy positions may require additional coursework. The S-040/S-052 sequence will leave students competitive with graduates of two-year master's degree sequences in quantitative methods from other education schools. Graduates of our sequences have earned placements at organizations known for educational research such as MDRC, American Institutes for Research, and the World Bank, as well as research divisions of international, state, and local educational agencies. Both S-012 and S-040 will prepare you to conduct analyses as a research assistant on various HGSE research projects or internships; if you continue with S-052, you'll be especially well-positioned to contribute.

## **3) Do you want to enroll in additional coursework in the spring that recommends or requires S-012, S-040, or S-052?**

Many courses require or recommend successful completion or co-enrollment in S-012, S-040, or S-052. Questionnaire Design (S-010B) requires S-012. Program Evaluation (A-164), Statistical Computing & Data Science (S-022), and Large-Scale Data Analysis (S-010C) require S-040. Measurement and Psychometrics (S-061) and Multilevel Modeling (S-043) require S-052. Students interested in spring courses that require quantitative fluency should review those prerequisites.

## **4) How much time will you have to dedicate to the work?**

S-040 and S-052 move at a fast pace and typically require more time than other courses, particularly for students who have not had recent quantitative training. Both S-040 and S-052 offer a great deal of support but accessing that support can require students to devote additional time. The S-012/S-030 sequence gives you preparation that is more than equivalent to S-040, with a deeper focus on the basic building blocks of statistics and over a longer timeframe. This sequence is also rigorous and demanding, but it typically requires less time. If you are taking 5 courses, have significant extra-curricular commitments, or think you will require additional time to process and understand quantitative methods, make sure that you can build a well-balanced semester. Be certain that whatever courses you select leave you enough time to engage with all of the opportunities that HGSE affords you, inside and outside of the classroom.

## **5) Do you need a first-year doctoral sequence in applied quantitative research methods?**

S-040 and S-052 are required courses for HGSE's own Ph.D. students. S-052 includes methods usually seen in second-year doctoral courses, like measurement, multivariate methods, and multilevel models. Ed.M. students who desire intermediate/advanced doctoral-level training in applied quantitative methods in a single year have access to this through the S-040 or S-052 sequences. Students who may benefit from a measured pace will still acquire valuable quantitative skills from the S-012/S-030 sequence and may choose to defer advanced methods until later in their careers.

## **6) Do you wonder whether you are a “math person” or a “numbers person” or ask, “Is any of this right for me?”**

All of this is right for you! Educational and societal systems and structures discourage people, particularly women and people of color, from thinking of themselves as “good at math” and learning quantitative skills. All our quantitative sequences and instructors are committed to including, encouraging, and supporting students in quantitative methods. We encourage all students, particularly those underrepresented in this field, to enroll in S-012, S-040, or S-052 even if (and we would say especially if) it feels like it is outside of your comfort zone.

## **7) Where can I go for more advice?**

Your HGSE Guides and Faculty Advisers know about these sequences and can tailor advice to your individual cases. We (Hadas Eidelman for S-012 and S-030, Joe McIntyre for S-040, and Andrew Ho for S-052) are also happy to answer any questions that you may have:

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