

ADVANCED EDUCATIONAL STATISTICS, CERTIFICATE IN (GRADUATE CERTIFICATE)

The graduate Certificate in Advanced Educational Statistics provides students with a strong foundation in statistical techniques commonly used in educational research. Students will develop skills in quantitative research and evaluation, including sampling, data collection, data cleaning, statistical modeling and interpretation of results. The program emphasizes the development of advanced quantitative methodological skills and the application of multilevel and structural equation models. Coursework covers key topics such as quantitative research design, multivariate statistics, multilevel modeling, structural equation modeling and machine learning. Graduates will be well-prepared to design and conduct quantitative educational research and to analyze complex social and educational data.

Student learning outcomes

- Understand basic and advanced methodological concepts that are associated with evaluation/assessment, measurement, qualitative and/or statistical research.
- Understand and effectively use a variety of data analysis methods and techniques that are associated with evaluation/assessment, measurement and/or statistical research.
- Develop an effective research report of evaluation/assessment, measurement and/or statistical research

VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (<http://www.graduate.vcu.edu/>) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the **academic regulations** section for additional information on academic regulations for graduate students. (<https://bulletin.vcu.edu/academic-regs/>)

Graduation requirements

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the **academic regulations** section for additional information on graduation requirements. (<https://bulletin.vcu.edu/academic-regs/grad/graduation-info/>)

Apply online today. (<https://www.vcu.edu/admissions/apply/graduate/>)

Admission requirements

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
Certificate	Fall	Apr 1	
	Spring	Nov 15	
	Summer	Apr 1	

In addition to the general admission requirements of the VCU Graduate School (<https://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements/>), the following requirements represent the minimum acceptable standards for admission:

1. Bachelor's degree
2. Two letters of recommendation addressing the student's potential for graduate study in education
3. Statement of intent
4. Transcripts of all previous college work
5. Resume or curriculum vitae

Please visit the School of Education website (<https://soe.vcu.edu/academics/certificates/>) for further information.

The curriculum is designed to provide students with advanced quantitative methodology skills in order to engage in research, evaluation and institutional assessment. In our rapidly changing world, in which data continues to proliferate, it is critical for students to have an understanding of how to collect, analyze and interpret many forms of educational data. This certificate fills this gap by providing students with a set of aligned skills in research and evaluation that they can use to obtain a variety of positions in academia and industry.

Degree requirements

Course	Title	Hours
Required courses		
EDUS 608	Educational Statistics	3
EDUS 663	Applied Multivariate Statistics in Education	3
EDUS 664	Multilevel Modeling in Education	3
EDUS 667	Applied Structural Equation Modeling in Education	3
EDUS 668	Applied Machine Learning in Education Research	3
EDUS 710 or EDUC 797	Quantitative Research Design Directed Research	3
Total Hours		18

The minimum total of graduate credit hours required for this certificate is 18.

Contact

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Additional contact

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