Rice Undergraduate Programs of Study

Rice University offers bachelor’s degrees in a wide array of disciplines across six schools of study. Students pursuing the bachelor of music degree or bachelor of architecture degree follow a structured, sequenced curriculum starting with the freshman year. However, all others are free to explore the university curriculum to its fullest extent, especially in the freshman and sophomore years. Students may select a major at any time prior to their junior year; all students are required to declare a major at the end of the sophomore year. Forty percent of Rice graduates complete a double major, often pairing majors from different schools to match their individual goals and interests. Rice provides a holistic undergraduate experience that equips our students with the knowledge, skills, and values to make a distinctive impact in the world. Review this outline of our curriculum to begin your exploration of all that Rice has to offer.

Schools of Study, Degrees Conferred, and Majors:

School of Architecture (BA, BArch)
- Courses also available in urban design.

Brown School of Engineering (BA, BSB, BSChE, BSCE, BSCS, BSEE, BSME, BSMS)
- Bioengineering - concentrations in cellular and molecular engineering, biomedical instrumentation and imaging, biomaterials and biomechanics
- Chemical & Biomolecular Engineering – focus areas in bioengineering, environmental science, materials science, computational engineering
- Civil Engineering - areas of focus include environmental engineering, hydrology and water resources, structural engineering and mechanics, urban infrastructure and management
- Computational & Applied Mathematics – study includes numerical analysis, operations research, optimization, differential equations, scientific computation
- Computer Science - areas of concentration in architecture, artificial intelligence, computational science, foundations, human-computer interaction, software systems
- Electrical & Computer Engineering - areas of concentration in bioengineering, computer engineering, systems control/communications/signal processing, electronic circuits and devices, quantum electronics and photonics
- Environmental Engineering - study includes urban and environmental systems, environmental chemistry, hydrology and watershed analysis, economics, management
- Materials Science - study of production, fabrication, and properties of materials such as metals and their alloys, semiconductors, ceramics, glasses, polymers
- Mechanical Engineering - areas of concentration in biomechanics, computational mechanics, fluid mechanics and thermal science, solid mechanics and materials, system dynamics and control
- Statistics – study includes theoretical and applied training orientations, engineering applications, business applications

School of Humanities (BA)
- Ancient Mediterranean Civilizations – study includes anthropology, classical studies, Greek, Latin, history, art history, linguistics, philosophy, religious studies
- Art History - wide range of study in European, American, and Asian art history, also Middle Eastern/Islamic art history, architectural history, film and media studies
- Asian Studies – study incorporates anthropology, art, art history, Hindi, history, humanities, linguistics, Chinese, Japanese, Korean, Sanskrit, political science, religious studies
- Classical Studies – focus on Greek, Latin
- English - study includes English and American literature, African-American literature, Third World, women writers, literary theory
- French Studies - study of contemporary France and the French-speaking world including language, literature, social science, philosophy, history, film, gender, post-colonialism
- German & Slavic Studies – study of German and German culture, Russian and Slavic studies
- Hispanic Studies – study of Spanish and Latin American literature, Spanish linguistics
- History – areas of focus include Ancient history, Medieval history, Modern Europe, United States, Asia, Latin America, Africa
- Kinesiology - areas of concentration in health science, sports medicine, sports management
- Linguistics - areas of concentration in language, cognitive science, second language acquisition, culture and society
- Medieval Studies – study includes art history, classics, English, French, German, Spanish, history, humanities, linguistics, music, philosophy, political science, religious studies
- Philosophy - study includes history of philosophy, logic, ancient and medieval philosophy, modern philosophy, metaphysics, philosophy of science, ethics, social and political philosophy
- Religious Studies - concentrations in religious traditions, methodology
- Study of Woman & Gender – wide range study can include anthropology, classics, English, French studies, German, Spanish, history, humanities, economics, political science, linguistics, music, psychology, philosophy, religious studies, sociology
- Visual and Dramatic Arts – study in studio arts (drawing, digital video & film production, painting, photography, printmaking, sculpture) and theatre.
- Courses also available in Italian and Russian.
Shepherd School of Music (BA, BMus)
- Composition
- Music History
- Music Theory
- Performance – Voice and Instrument

Wiess School of Natural Sciences (BA, BS)
- Astronomy/Astrophysics – study of galactic astronomy, high energy astrophysics, space physics
- Biochemistry and Cell Biology – study of biochemistry, cell biology, molecular biology, biophysics, developmental biology
- Chemical Physics - coursework includes organic chemistry, physical chemistry, mechanics, electrodynamics, waves and optics, computational and applied mathematics
- Chemistry - study in organic, inorganic, physical, and theoretical chemistry, plus extensive research in nanosciences
- Earth Science - geology, geochemistry, geophysics, environmental Earth Science, and study of Earth processes, materials, observations, and history
- Ecology & Evolutionary Biology - topics include ecology, evolution, animal behavior, population genetics, animal and plant biology, marine biology, global ecology, statistics, molecular evolution
- Mathematics - topics include real and complex analysis, differential geometry, abstract algebra, algebraic and geometric topology, partial differential equations
- Physics - topics include applied physics, biophysics, condensed matter physics, nuclear and particle physics, space physics, and atomic, molecular, and optical physics

School of Social Sciences (BA)
- Anthropology – includes archaeology, social/cultural anthropology
- Cognitive Sciences – incorporates neuroscience, psychology, philosophy, linguistics, computer science
- Economics – study includes microeconomic theory, macroeconomic and monetary theory, econometrics and microeconometrics, international economics, applied/empirical microeconomics, public economy, industrial organization, labor and energy
- Managerial Studies – coursework includes accounting, economics, political science, psychology, statistics
- Mathematical Economic Analysis - coursework in economic theory, applied economics, econometrics, mathematics, statistics
- Policy Studies – topics include environmental policy, government policy and management, healthcare management, international affairs, law and justice, business policy and management, urban and social change
- Political Science – study of American political science, comparative politics, international relations
- Psychology – specializations in cognitive psychology, industrial-organizational psychology, neuropsychology, human and computer interaction
- Sociology – major topics include racial and ethnic stratification, migration, medical sociology, culture and women’s activism, family, environmental concerns, religion, political sociology

Pre-Professional Preparation:
- Pre-Med, Pre-Law, Pre-Business, Education Certification

Interdisciplinary Centers and Research Institutes at Rice University:
- James A. Baker III Institute for Public Policy (BIPP)
- Center for Biological and Environmental Nanotechnology (CBEN)
- Center for Chemical Processing Technology (CCPT)
- Center for Computational Geophysics
- Center for Computational Finance and Economic Systems
- Center for Education
- Center for High Performance Software Research (HiPerSoft)
- Center for Medical Ethics and Health Policy
- Center for Multimedia Communication (CMC)
- Center for Plant Sciences
- Center for the Study of Environment and Society
- Center for the Study of Women, Gender & Sexuality
- Center for the Study of Languages
- Center for Technology in Teaching and Learning (CTTL)
- Center on the Management of Information Technology (COMIT)
- Computer and Information Technology Institute (CITI)
- Energy and Environmental Systems Institute (EESI)
- Hazardous Substances Research Center/South and Southwest Institute of Biosciences and Bioengineering (IBB)
- W.M. Keck Center for Interdisciplinary Bioscience Training
- Rice Alliance for Technology and Entrepreneurship
- Rice Building Institute
- Rice Bioinformatics Group
- Rice Center for Organizational Effectiveness Studies
- Rice Design Alliance (RDA)
- Rice Quantum Institute (RQI)
- Rice Space Institute
- Institute for Nanoscale Science & Technology
- Texas Center for Crystalllography
- The Humanities Research Center