Olmsted Hall, 2340 Phone: 951-827-4551, Email: undergradbusiness@ucr.edu

This is a high unit major that needs to be discussed with Business Advisors prior to starting curriculum. An early start is highly recommended to complete the degree program within four years.

UCR UNIT VALUE	SCHOOL OF BUSINESS MAJOR REQUIREMENTS	PREREQUISITES
MAJOR LOWER-DIVISION REQUIREMENTS (12-13 courses [at least 52 units])		
Take **ALL** of the following:		
4	**BUS 010** Introduction to Business	None
4	**BUS 020** Financial Accounting and Reporting	None
4	**CS 009A** Introduction to Python Programming with Applications	Concurrent enrollment in a college level math course, or credit for MATH 009A.
5	**ECON 002** Introduction to Macroeconomics	None
5	**ECON 003** Introduction to Microeconomics	None
10-12	**Option 1: MATH 009A & MATH 009B & MATH 009C** First-Year Calculus Sequence	**MATH 009A**: A sufficiently high score on the Mathematics Advisory Examination, as determined by the Mathematics Department or MATH 005 with a grade of C- or better or MATH 006B with a grade of C- or better or equivalent. **MATH 009B:** A score of 3 or higher on the AB Advanced Placement Test in Mathematics or MATH 007A or MATH 008B or MATH 009A or MATH 09HA with a grade of C- or better or equivalent. **MATH 009C:** A score of 3 or higher on the Advanced Placement exam for Calculus BC, MATH 007B or MATH 009B or MATH 009HB with a grade of C- or better.
	Option 2: MATH 005B Principles of Calculus II & **MATH 005C** Principles of Calculus III	**MATH 005B:** Math 005A with a grade of C- or better. **MATH 005C:** Math 005B with a grade of C- or better.
4	**MATH 010A** Calculus of Several Variables	MATH 007B or MATH 009B or MATH 09HB with a C- or better or equivalent.
4	**MATH 010B** Calculus of Several Variables	MATH 010A with a grade of C- or better or equivalent.
5	**MATH 031** Applied Linear Algebra	MATH 007A with a grade of C- or better or MATH 009A with a grade of C- or better or MATH 09HA with a grade of C- or better; CS 010A with a grade of C- or better or MATH 007B with a grade of C- or better or MATH 009B with a grade of C- or better or MATH 09HB with a grade of C- or better.
4	**MATH 046** Introduction to Ordinary Differential Equations	MATH 007B or MATH 009B or MATH 09HB with a grade of C- or better or equivalent.
5	**STAT 010, STAT 008, or ECON 101** Introduction to Statistics	**STAT 010:** MATH 005A or MATH 006B or MATH 007A or MATH 009A or MATH 09HA. **STAT 008:** CS 008 or CS 009A or CS 010A; MATH 004 or MATH 005A or MATH 006B or MATH 007A or MATH 009A or MATH 09HA or MATH 022; or equivalent. **ECON 101:** MATH 007A or MATH 009A or MATH 09HA or MATH 022; or equivalent.

UPPER-DIVISION REQUIREMENTS (19-20 courses [at least 80 units):		
Economics Courses Take **ALL** of the following courses:		
5	**ECON 104A** Intermediate Microeconomics Theory	ECON 003 with a grade of C- or better or ECON 003H with a grade of C- or better, MATH 007A or MATH 009A or MATH 09HA.
5	**ECON 104B** Intermediate Microeconomics Theory	ECON 102 with a grade of C or better or ECON 104A; MATH 007A or MATH 009A or MATH 09HA.
General Business Take **ALL** of the following courses:		
4	**BUS 100W** Management Writing and Communication	ENGL 001B with a grade of C or better; BUS 020; ECON 003; STAT 008; or equivalent. (STAT 010 can be used in lieu of Stat 008 as a pre-req with permit for this major only)
Finance Take **ALL** of the following courses:		
4-8	*Option 1:* **BUS 133** Accelerated Foundations of Finance *Generally offered Fall quarter only*	BUS 020 with a grade of B or better, STAT 004 with a grade of B or better or STAT 008 with a grade of B or better or STAT 010 with a grade of B or better or ECON 101 with a grade of B or better; ECON 003 with a grade of B or better or ECON 003H with a grade of B or better; or a score of 3 or higher on the Advanced Placement exam in Statistics.
	Option 2: **BUS 106** Introduction to Financial Management **& BUS 132** Foundations of Finance	**BUS 106:** BUS 020; ECON 003 or ECON 003H; STAT 008 or ECON 101; or equivalent . **BUS 132:** BUS 020; ECON 101 or STAT 008; ECON 102 or ECON 103 or ECON 104A or ECON 105A. (STAT 010 can be used in lieu of Stat 008 as a pre-req with permit for this major only)
4	**BUS 131** Fixed-Income Securities	BUS 133 or BUS 132; BUS 106 or ECON 134.
4	**BUS 134** Corporate Finance	BUS 133 with a grade of C- or better or BUS 132 with a grade of C- or better; BUS 106 with a grade of C- or better or ECON 134 with a grade of C- or better.
4	**BUS 136** Investements: Security Analysis and Portfolio Management	BUS 133 with a grade of C- or better or BUS 132 with a grade of C- or better; BUS 106 with a grade of C- or better or ECON 134 with a grade of C- or better.
4	**BUS 137** Investments: Derivatives Markets	BUS 133 with a grade of C- or better or BUS 132 with a grade of C- or better; BUS 106 with a grade of C- or better or ECON 134 with a grade of C- or better.
4	**BUAS 101** Foundations of Insurance *NEW COURSE Fall 2023 -Generally offered Fall quarter only*	BUS 133 or BUS 106 or ECON 134.
Supply Chain and Operations Management Courses Take **ALL** of the following courses:		
4	**BUS 125** Simulation for Business	BUS 104 or STAT 104; or equivalent. (STAT 010 can be used in lieu of BUS 104 as a pre-req with permit for this major only).
4	**BUS 126** Practical Business Forecasting *Generally offered Fall quarter only*	BUS 105; or equivalent. (STAT 010 can be used in lieu of BUS 105 as a pre-req with permit for this major only).
4	**BUS 130** Supply Chain Modeling	BUS 104 or STAT 104; or equivalent. (STAT 010 can be used in lieu of BUS 105 as a pre-req with permit for this major only).
Statistics Courses Take **ALL** of the following courses:		
4	**STAT 107** Introduction to Statistical Computing with R *Generally offered fall and winter quarters only*	STAT 010; or equivalent. (RECOMMEND TAKING SOPHOMORE YEAR, BUT NEEDS TO BE COMPLETED BY THE START OF JUNIOR YEAR)
4	**STAT 146** Statistical Forecasting Techniques *Generally offered winter quarters only*	STAT 160A; or equivalent.
4	**STAT 160A** Elements of Probability and Statistical Theory *Generally offered Fall quarters only*	MATH 009C or MATH 09HC -may be taken concurrently. (RECOMMEND TAKING SOPHOMORE YEAR, BUT NEEDS TO BE COMPLETED BY THE START OF JUNIOR YEAR)
4	**STAT 160B** Elements of Probability and Statistical Theory *Generally offered Winter quarters only*	STAT 160A with a grade of C- or better.
4	**STAT 160C** Elements of Probability and Statistical Theory *Generally offered spring quarters only*	STAT 160B with a grade of C- or better.

UPPER-DIVISION REQUIREMENTS... Continued (19-20 courses [at least 80 units])

Choose **TWO** (2) courses from the following list:

4	**STAT 161** Introduction to Probability Models *offered Spring quarters only*	*Generally*	STAT 160B; or equivalent with a grade of C- or better.
4	**STAT 167** Introduction to Data Science *offered spring quarters only*	*Generally*	STAT 107 with a grade of C- or better; CS 010A with a grade of C- or better. (Students that complete CS 008, will need to receive a permit from the Statistics department)
4	**STAT 170** Regression Analysis *Generally offered Fall quarters only*		STAT 107; STAT 156B or STAT 160B; or equivalent.
4	**STAT 171** General Statistical Models *offered winter quarters only*	*Generally*	STAT 170

ADDITIONAL DEGREE INFORMATION AND GRADUATION REQUIREMENTS FOR B.S. in ACTUARIAL SCIENCE

1. CNAS Breadth Requirements to be discussed with a Business Advisor.

2. Foreign language and ENGL 001C must be completed with a letter grade of C or better. BUS 100W can be used to satisfy ENGL 001C with a grade of C or better.

3. Minimum 2.0 GPA for both cumulative and any upper-division major requirements.

4. An ideal path of study would include passing at least one (1) actuarial exam by fall of year 3. Please visit the following societies for more information on exams: Society of Actuaries https://www.soa.org/ or Casualty Actuarial Society https://www.casact.org/

5. Permits are provided by the department offering the course.
For a BUS or BUAS course https://business.ucr.edu/undergraduate/student-forms . For an MATH, STAT course https://ucrbsgsac.wufoo.com/forms/enrollment-request/ . For a CS course https://student.engr.ucr.edu/online-petition . For an Econ course https://chassem.ucr.edu/continuing-student-enrollment.

6. Please join UCR GroupMe for program support, https://groupme.com/join_group/69054577/qHr8VqXz

School of Business Breadth Requirements Bachelor of Science (BS) Degree
Please work with a Business Advisor for more details about the breadth requirements

Breadth Requirement Unit Summary	
English Composition	12 units up to ENGL 001C (BUS 100W can be used for ENGL 001C with a grade of C or better).
Humanities	12 units. One course each from **A**. World History **B**. Fine Arts, Literature, Philosophy, or Religious Studies **C.** One additional Humanities course
Social Sciences	8 units. One course each from **A.** Economics or Political Science (recommend ECON 003) **B**. Anthropology, Psychology, or Sociology
Ethnicity (4 units)*	*The 4-unit ethnicity requirement can be applied to either the Humanities or Social Sciences requirement, depending on content.
Natural Sciences and Mathematics	20 units. One course from each **A.** Biological Sciences **B.** Mathematics (Recommend Math 009A or 005B) **C.** Physical Science course **D.** Two additional courses from Mathematics, Statistics, or Computer Science (Recommend MATH 009B or 009C, MATH 010A or MATH 010B, MATH 031, or MATH 046, STAT 010)
Additional Courses	12 units: Additional courses from Humanities, Social Science, or Natural Sciences and Mathematics
Total Units	**52 plus English Composition**

Internships: Internships offer learning experiences outside of the classroom. They enhance your academic and career goals. An internship can help you "test drive" a possible career path. An internship is a perfect way to connect your academic experience with the professional world. Internships can also lead to employment opportunities. Please visit the Career Center https://careers.ucr.edu/ . if you have any questions. If you wish to earn academic credit, please contact your academic advisor.

UCR's Student Organizations: As a student, involvement is important in your professional development to expand your resume. There are many great benefits as a result of getting involved with an organization, such as developing soft skills, networking opportunities, and the ability to cultivate your leadership style. Students can express interest and join organizations with a click of a button! https://highlanderlink.ucr.edu/

School of Business, Undergraduate Business Programs Contact Information
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