

B.S. in Business Data Science Checklist (DSC-BS-002)

The Business Data Science major can be combined with any major or minor, except for the Business minor (RSM-MN-002), the Data Science minor (DSC-MN-001), and the Data Science major (DSC-BS-001).

Important Policies:

- All courses must be taken for a *letter grade* and passed with a grade of C- or better. Students must finish the major with an overall major GPA of 2.0 or higher.
- Students may overlap 8 upper-division units between their major and minor, per minor. There is no restriction for overlapping lower-division units.
- If you have a double major, each major must have a minimum of 10 unique upper-division courses.

Major Requirements

Students can find when MGT courses are offered by visiting our [Tentative Course Schedule](#). To determine when DSC courses are offered, view their [course offerings link](#).

All courses for the Business Data Science major MUST be taken for a **letter grade**.

MATH & LOWER-DIVISION CORE COURSES (11 classes, 44 units)

MATH (5 classes, 20 units)

COURSE #	COURSE TITLE	PRE-REQUISITES	QUARTER TAKEN
MATH-018	Linear Algebra	<i>Math Placement Exam qualifying score, or AP Calculus AB score of 3 (or equivalent AB subscore on BC exam), or MATH-04C, or MATH-010A, or MATH-020A. Students who have not completed listed prerequisites may</i>	

		<i>enroll with consent of instructor.</i>	
MATH-020A	Calculus 1	<i>Math Placement Exam qualifying score, or AP Precalculus score of 5, or AP Calculus AB score of 3 (or equivalent AB subscore on BC exam), or MATH-004C or MATH-010A</i>	
MATH-020B	Calculus 2	<i>AP Calculus AB score of 4 or 5, or AP Calculus BC score of 3, or MATH-020A or MATH-10B or MATH-10C</i>	
MATH-020C	Calculus 3	<i>AP Calculus BC score of 4 or 5, or MATH-020B</i>	
MATH-183	Statistical Methods	<i>MATH-020C or MATH-031BH, or consent of instructor</i>	

LOWER DIVISION (4 classes, 16 units)

COURSE #	COURSE TITLE	PRE-REQUISITES	QUARTER TAKEN
DSC-010	Python Programming and Data Structures	<i>None</i>	
DSC-020	Programming and Basic Data Structures	<i>DSC-010/R</i>	
DSC-040A	Theoretical Foundations of Data Science	<i>DSC-010/R</i> <u>AND</u> <i>(MATH 20C or MATH 31BH)</i> <u>AND</u>	

		<i>MATH-018 or MATH-020F or MATH-031AH</i>	
DSC-080	Data Science Practice	<i>DSC-030/R AND DSC-040A/R</i>	

SUBJECT DOMAIN (2 classes, 8 units)

COURSE #	COURSE TITLE	PRE-REQUISITES	QUARTER TAKEN
DSC-031	Introduction to R Programming	<i>DSC-020/R</i>	
MGT-045	Principles of Accounting	<i>None</i>	

UPPER-DIVISION COURSES (13 classes, 52 units)

UPPER-DIVISION CORE COURSES (9 classes, 36 units)

COURSE #	COURSE TITLE	PRE-REQUISITES	QUARTER TAKEN
DSC-100	Introduction to Data Management	<i>DSC-040A/R AND DSC-080A/R</i>	
DSC-140A	Machine Learning	<i>DSC-080/R</i> AND <i>ECE-109 or ECON-120A or MAE-108 or MATH-180A or MATH-183 or MATH-186</i>	
DSC-148 OR MATH-189	Data Mining OR Exploratory Data Analysis and Inference	DSC-148: <i>DSC-040B or CSE-012</i> AND <i>DSC-080 or CSE-015L or CSE-029</i> AND <i>MATH-180A or MATH-180B or</i>	

		MATH-181A or MATH-183 or MATH-186 or CSE-103 or ECE-109 or ECON-120A or MAE-108 MATH-189: MATH-018 or MATH-020F or MATH-031AH, and MATH-020C <u>AND</u> BENG-134 or CSE-103 or ECE-109 or ECON-120A or MAE-108 or MATH-180A or MATH-183 or MATH-186 or SE-125	
DSC-181/ MGT-191 (crosslisted)	Business Data Science Project	DSC-100 and DSC-040A and DSC-140A <u>AND</u> MGT-045/R and at least 3 of the core MGT courses (MGT-100, MGT-127R, MGT-180/R, MGT-160/R, MGT-168) consent of instructor	
MGT-100	Customer Analytics	ECON-120A or BENG-100 or COGS-014B or ECE-109 or MAE-108 or MATH011 or MATH 180A or MATH 183 or MATH 186 or MGT 3 or PSYC 60 or SIO 187. ECON 120A recommended	
MGT-127/127R	AI and Technology Strategy	None	
MGT-160	Experiments in Firms	Math <u>AND</u> Statistics MATH: MATH-010A or MATH-018 or	

		MATH-020A or MATH-031AH <u>AND</u> STATISTICS: BENG-100 or BIEB-100 or COGS-014B or ECE-109 or ECON-120A or MAE-108 or MATH-011 or MATH-180A or MATH-181A or MATH-183 or MATH-186 or MGT-003 or PSYC-060 or SIO-187	
MGT-168	Managerial Decision Making	None	
MGT-180/180R	Business Finance	ECON-100A or ECON-120A or MAE-108 or MATH-180A or MATH-183 or MATH-186 or ECE-109 Due to course overlap, it's not recommended to take both MGT 180 and MGT 181.	

UPPER-DIVISION ELECTIVES (4 classes, 16 units)

DSC ELECTIVES: CHOOSE 2 (8 units)

- Any courses between DSC-100 and DSC-170 (Be sure to check prerequisites prior to enrolling)
- DSC-190 (Department and instructor approval required)

MGT ELECTIVES: CHOOSE 2 (8 units)

MGT-104	Strategic Customer Insight	MGT 100 or MGT 103	
MGT-108R	Applied Marketing Research	None	
MGT-112	Global Business Strategy	MGT 100 or MGT 103	

		<u>AND</u> MGT-180 or MGT-181 or MGT-187	
MGT-120	Behavioral Science and Incentive Design	<i>BENG-100 or COGS-014B or ECE-109 or ECON-120A or MAE-108 or MATH-011 or MATH-180A or MATH-183 or MATH-186 or MGT-003 or PSYC-060 or SIO-187</i>	
MGT-137	Financial Statement Analysis	MGT-045 or ECON/MGT-004 <u>AND</u> MGT-005	
MGT-153	Information Technology in Business Analytics	<i>Math <u>AND</u> Statistics</i> <i>MATH:</i> <i>MATH-010A or MATH-018 or MATH-020A or MATH-031AH</i> <u>AND</u> <i>STATISTICS:</i> <i>BENG-100 or BIEB-100 or COGS-014B or ECE-109 or ECON-120A or MAE-108 or MATH-011 or MATH-180A or MATH-181A or MATH-183 or MATH-186 or MGT-003 or PSYC-060 or SIO-187</i>	
MGT-155	Advanced Business Analytics	MGT-151A or MGT-151R or MGT-153	
MGT-159T	Topics in Analytics	MGT-151A or MGT-151R or MGT-153	
MGT-162/162R	Negotiations	<i>None</i>	

MGT-164	Business and Organizational Leadership	<i>None</i>	
MGT-171/171R	Operations Management	<i>None</i>	
MGT-172/172R	Business Project Management	<i>None</i>	
MGT-175	Supply Chain Management	<i>None</i>	
MGT-186	Real Estate Finance	<i>MGT-180/R or MGT-181</i>	
MGT-188	Collecting and Analyzing Financial Data	<i>MGT-180/R or MGT-181</i>	

***Core courses cannot also be used as electives (i.e. MATH 183, MGT 100, etc. cannot be used as an elective)**

*Questions? UCSD students must contact Rady Undergrad Advising through the VAC vac.ucsd.edu.
Non-UCSD students can send an email to undergrad@rady.ucsd.edu.*