

# ARTIFICIAL INTELLIGENCE FOR INNOVATION MAJOR (B.S.)

The multidisciplinary STEM major in Artificial Intelligence for Innovation exposes students to state-of-the-art knowledge about one of the most important and exciting technological developments of our time. It familiarizes students with the technological, algorithmic, ethical, and societal skills they need to competently operate in professional environments that are increasingly dominated by artificial intelligence and its applications. Students acquire the capacity to succeed in AI-dominated workplace environments while also learning to navigate the ethical challenges posed by developments in AI and to think critically about their societal and cultural implications.

For further information about degree requirement policies and guidelines, see the Degree Requirements ([catalog.bentley.edu/undergraduate/degree-requirements/](http://catalog.bentley.edu/undergraduate/degree-requirements/)) page.

## Major Requirements

### Major Courses (27 Credits)

Course	Title	Credits
<b>Required Courses</b>		
CS 230	Introduction to Programming with Python	3
CS 250	AI Foundations and Applications in Business	3
CS 370	Introduction to Machine Learning	3
MA 214	Intermediate Applied Statistics	3
PH 160	AI, Technology, and Values	3
Select zero to one course in Technology:		0 to 3
CS 240	Business Processing and Communications Infrastructure	
Select one to two courses in Data Exploration:		3 to 6
EC 282	Introduction to Econometrics	
MA 252	Regression Analysis	
MA 346	Data Science	
Select one course in Human Aspects:		3
GLS 228	Science, Technology & Society	
PSY 310	Minds, Machines, and the Future of Work	
PH 162	Love, Sex, and Robots	
PH 274	The Computational Mind	
PSY 315	Cyber Psychology	
SO 264	Technology, AI, Society, and Work	
Select one course in Business:		3
MK 363	AI and Marketing	
CS 341	Information Security and Computer Forensics	
<b>Total Credits</b>		<b>27</b>

### The Business Environment (6 Credits)

Course	Title	Credits
CS 305	Business Processes and Systems	3
MG 300	Strategic Management	3
<b>Total Credits</b>		<b>6</b>

## General Degree Requirements

### Foundations for Success (15 Credits)

Course	Title	Credits
FDS 100	Falcon Discovery Seminar	3

#### Communications and Writing

Select one from:

EMS 101	Critical Reading and Writing	3
or EMS 101L	Critical Reading and Writing with Lab	
or EMS 102	Critical Reading and Writing for ESOL	
or EMS 102L	Critical Reading and Writing for ESOL with Lab	

And one from:

EMS 104	Multimodal Communication	3
or EMS 105	Multimodal Communication for ESOL	

#### Information Technology

CS 100	Solving Business Problems with Information Technology	3
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#### Mathematical Sciences

Select one from:

MA 105	Mathematical Foundations for Business	3
or MA 105L	Mathematical Foundations for Business with Lab	
or MA 107	Applied Calculus for Business	
or MA 107L	Applied Calculus for Business with Lab	
or MA 131	Calculus I	
or MA 131L	Calculus I with Lab	

<b>Total Credits</b>		<b>15</b>
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### Context and Perspectives (18 Credits)

Course	Title	Credits
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Students must take six courses, one in each category of Context and Perspectives:

Culture, Change, and Behavior ( <a href="http://catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#culturechangeandbehavior">catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#culturechangeandbehavior</a> )		
Globalization ( <a href="http://catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#globalization">catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#globalization</a> )		
Institutions and Power ( <a href="http://catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#institutionsandpower">catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#institutionsandpower</a> )		
Race, Gender, and Inequality ( <a href="http://catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#racegenderandinequality">catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#racegenderandinequality</a> )		
Scientific Inquiry ( <a href="http://catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#scientificinquiry">catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#scientificinquiry</a> )		

Values, Ethics, and Society ([catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#valuesethicsandsociety](http://catalog.bentley.edu/undergraduate/degree-requirements/context-and-perspectives/#valuesethicsandsociety))

<b>Total Credits</b>	<b>18</b>
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### Business Dynamics/Business Administration Minor (18 Credits)

Course	Title	Credits
All courses are required:		
AC 115	Introduction to Financial Reporting and Analysis	3
EC 111	Principles of Microeconomics	3
FI 118	Introduction to Finance	3
LA 100	Business Law	3
MG 116	Human Dynamics in Organizations	3
ST 113	Business Statistics	3
<b>Total Credits</b>		<b>18</b>

### Communication Intensive

All students are required to take a three-credit course designated as a Communication Intensive. This requirement can be met within a variety of course subjects in both Arts & Sciences and Business. Communication Intensive courses are designated with a "CI" in the course schedule. *Transfer students with a minimum of 30 credits will be waived from the Communication Intensive requirement.*

Please note that certain majors have an additional three-credit Communication Intensive built into their major requirements, separate from the general CI requirement.

### Additional Requirements

#### Arts and Sciences Electives (15 Credits)

Course	Title	Credits
Select five Arts & Sciences elective courses		15
<b>Total Credits</b>		<b>15</b>

#### Unrestricted Electives (21 Credits)

Course	Title	Credits
Select seven elective courses		21
<b>Total Credits</b>		<b>21</b>

**Total: 120 Credits**