## Faculty Senate approved April 9, 2020

The requirements listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. The text under the heading titled Proposed will show strikethroughs for deletions, and underlines for additions, as needed.

| Dept | Proposed |  | Effective Date |
| :---: | :---: | :---: | :---: |
| Mathematicsand StatisticsRemove CASrequirementsand revisegraduationrequirementsfor Bachelor ofScience in DataAnalytics -ActuarialScience Option | Data Analytics - Actuarial Science Option (120 Credits) |  | 8-20 |
|  | Students are admitted to the Actuarial Science option upon completion of 24 semester credits with a 2.0 GPA . |  |  |
|  | First Year |  |  |
|  | First Term | Credits |  |
|  | CPT S 115, CS 115, or STAT 115 | 3 |  |
|  | CPT S 121, 131, or CS 121 | 4 |  |
|  | ENGLISH 101 [WRTG] | 3 |  |
|  | MATH 171 [QUAN] | 4 |  |
|  | Elective | 1 |  |
|  | Second Term Credits |  |  |
|  | CPT S 122, 132, or CS 122 | 4 |  |
|  | ECONS 101 [SSCI] | 3 |  |
|  | HISTORY 105 [ROOT] | 3 |  |
|  | MATH 172 | 4 |  |
|  | Elective | 1 |  |
|  | Second Year |  |  |
|  | First Term | Credits |  |
|  | B LAW 210 | 3 |  |
|  | CPT S 215 or CS 215 | 3 |  |
|  | ECONS 102 [SSCH | 3 |  |
|  | MATH 220 | 2 |  |
|  | STAT 360 | 3 |  |
|  | Second Term | Credits |  |
|  | Arts [ARTS] | 3 |  |
|  | Communication [COMM] or Written Communication [WRTG] | 3 |  |




|  | STAT 435 [M] <br> Electives <br> Second Term <br> EPT S 415-CPT S 451 <br> SOIL SCI 374 <br> SOIL SCI 468 <br> STAT 436 <br> STAT 437 <br> Electives <br> Fourth Year <br> First Term <br> BIOLOGY 372 [M], NATRS SOE 464 [M], or SOIL SCI 302 [M] <br> Diversity [DIVR] <br> Foreign Langtage, if needed, or Electives <br> STAT 419 <br> Electives <br> Second Term <br> CPT S 424 [CAPS] [M] or STAT 424 [CAPS] [M] <br> Foreign Langtage, if needed, or Electives <br> PHIL 450 <br> Social Sciences [SSCI] <br> Electives <br> [No Footnotes] | Credits <br> Credits <br> 3 <br> Credits <br> 3 <br> 6 <br> 3 <br> 3 <br> 6 |  |
| :---: | :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements for Bachelor of Science in Data Analytics Business Option | Data Analytics - Business Option (120 Credits) <br> Students are admitted to the Business option upon completion of 24 credits with a 2.0 GPA. <br> First Year <br> First Term <br> CPT S 115, CS 115, or STAT 115 <br> CPT S 121, 131, or CS 121 <br> ENGLISH 101 [WRTG] <br> MATH 171 [QUAN] <br> Elective <br> Second Term <br> CPT S 122, 132, or CS 122 <br> ECONS 101 [SSCI] | ster <br> Credits <br> 3 <br> 4 <br> 3 <br> 4 <br> 1 <br> Credits <br> 4 <br> 3 | 8-20 |



|  |  |  |
| :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements for Bachelor of Science in Data Analytics Computation Option | Data Analytics - Computation Option (120 Credits) <br> Students are admitted to the Computation option upon completion of 24 semester credits with a 2.0 GPA. <br> First Year <br> First Term <br> CPT S 115 or STAT 115 <br> CPT S 121 or 131 <br> HISTORY 105 [ROOT] <br> MATH 171 [QUAN] <br> Elective <br> Second Term <br> CPT S 122 or 132 <br> ENGLISH 101 [WRTG] <br> Humanities [HUM] <br> MATH 172 <br> Elective <br> Second Year <br> First Term <br> Credits <br> Biological Sciences [BSCI] or Physical Sciences [PSCI] with lab ${ }^{1}$ <br> Communication [COMM] or Written Communication [WRTG] <br> CPT S 215 <br> MATH 220 | 8-20 |



|  | Footnotes <br> ${ }^{1}$ To meet University and College of Arts and Sciences requirements, students must take a [BSCH] courrse with lab and [PSCI] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCC]. SCIENCE 102 [SCI] is offered Spring semester. For a total of 7 credits - one Biological Sciences [BSCI] and one Physical Sciences [PSCI] course, including one lab course. <br> ${ }^{2}$ Students who take STAT 412 or 423 will need to take an [M] course to fulfill major requirements. <br> ${ }^{32}$ Computation Electives ( 9 credits): Approved courses include CPT S 434, 440, 471, MATH 448, and 466. |  |
| :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements for Bachelor of Science in Data Analytics Data Visualization Option | Data Analytics - Data Visualization Option (120 Credits) <br> The following minimum criteria must be met for consideration for admission to the Data Vistalization option: <br> - - 30 semester credits earned; <br> - - a grade of $C$, or higher, in each of the Required Admission Courses; <br> - - completion of the following Required Admission Courses: MATH 171; MATH 172 or MATH 182; MATH 220; and one of the following for <br> Program Design and Data Structure: <br> - CS 121 and CS 122, or <br> - CPT S 121 and CPT S 122, or <br> - CPT S 131 and CPT S 132; <br> - - Required Admission Courses GPA of 2.50 or higher. <br> Admission Gtarantee: Students who have completed the courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the courses that have been taken that are required in the major, and who have not repeated any required course, are guaranteed admission. <br> Students are admitted to the Data Visualization option upon completion of 24 semester credits with a 2.0 GPA. <br> First Year <br> First Term <br> Credits <br> CPT S 115 , STAT 115 , or CS 115 <br> CPT S 121, 131, or CS 121 <br> ENGLISH 101 [WRTG] <br> MATH 171 [QUAN] <br> Elective <br> Second Term <br> Credits <br> CPT S 122, 132, or CS 122 <br> DTC 101 [ARTS] <br> HISTORY 105 [ROOT] <br> MATH 172 <br> Elective <br> Second Year <br> First Term <br> Credits <br> CPT S 215 or CS 215 | 8-20 |



|  | Footnotes <br> DTC Requirement (4 courses): Approved courses include DTC 335, 336, 354, 355 [M], 435, 477, 478. An [M] course may be needed to fulfill University requirements. <br> ${ }^{2}$ To meet University and College of Arts and Sciences requirements, students must take a [BSCI] courrse with lab and [PSCI] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCH]. SCIENCE 102 [SCI] is effered Spring semester.For a total of 7 credits - one Biological Sciences [BSCI] and one Physical Sciences [PSCI] course, including one lab course. |  |
| :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements for Bachelor of Science in Data Analytics Economics Option | Data Analytics - Economics Option (120 Credits) <br> Students are admitted to the Economics option upon completion of 24 semester credits with a 2.0 GPA . <br> First Year <br> First Term <br> CPT S 115 or STAT 115 <br> CPT S 121 or 131 <br> ENGLISH 101 [WRTG] <br> MATH 171 [QUAN] <br> Second Term <br> CPT S 122 or 132 <br> ECONS 101 [SSCI] <br> HISTORY 105 [ROOT] <br> MATH 172 <br> Elective <br> Second Year <br> First Term <br> Biological Sciences [BSCI] or Physical Sciences [PSCI] (with lab) ${ }^{1}$ <br> CPT S 215 <br> ECONS 102 [SSCH <br> MATH 220 <br> STAT 360 <br> Second Term <br> Credits <br> Biological Sciences [BSCI] or Physical Sciences [PSCI]_with lab ${ }^{1}$ Communication [COMM] or Written Communication [WRTG] <br> CPT S 315 <br> ECONS 301 <br> STAT 380 <br> Complete Writing Portfolio <br> Third Year | 8-20 |


|  | First Term <br> Arts [ARTS] <br> CPT S 451-CPT S 415 <br> Economics Elective ${ }^{2}$ <br> ECONS 302 <br> ECONS 311 [M] <br> STAT 435 <br> Second Term <br> EPT S 415-CPT S 451 <br> Economics Electives ${ }^{2}$ <br> Humanities [HUM] <br> STAT 436 <br> STAT 437 <br> Fourth Year <br> First Term <br> Diversity [DIVR] <br> Economics Electives ${ }^{2}$ <br> Foreign Langtage, if needed, or Electives <br> STAT 419 <br> Electives <br> Second Term <br> CPT S 424 [CAPS] [M] or STAT 424 [CAPS] [M] <br> Foreign Language, if needed, or Electives <br> PHIL 450 <br> STAT $443^{3}$ <br> Electives <br> Footnotes <br> ${ }^{1}$ To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCH] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 104 [SCH] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCH]. SCIENCE 102 [SCH] is effered Spring semester. For a total of 7 credits - one Biological Sciences [BSCI] and one Physical Sciences [PSCI] course, including one lab course. <br> ${ }^{2}$ Economics Electives ( 12 credits; minimum 9 credits at the 400 level): Approved courses include ECONS $321,323,324,327,424,425,426,451,452$, and 490. <br> ${ }^{3}$ ECONS 525 can be substituted for STAT 443. |  |
| :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements | Data Analytics - Life Sciences Option (120 Credits) <br> Students are admitted to the Life Sciences option upon completion of 24 semester credits with a 2.0 GPA . | 8-20 |



|  | MBIOS 478 <br> STAT 436 <br> STAT 437 <br> Electives <br> Fourth Year <br> First Term <br> BIOLOGY 335 <br> Communication [COMM] or Written Communication [WRTG] <br> Diversity [DIVR] <br> Foreign Langtage, if needed, or Electives <br> STAT 419 <br> Electives <br> Second Term <br> BIOLOGY 474 <br> CPT S 424 [CAPS] [M] or STAT 424 [CAPS] [M] <br> Diversity [DIVR] <br> Foreign Language, if needed, or Electives <br> PHIL 450 <br> Electives | Credits <br> 3 <br> 3 3 <br> 6 <br> 3 <br> 6 <br> Credits <br> 4 <br> 3 <br> $\underline{3}$ <br> 4 <br> 3 <br> $\underline{3}$ |  |
| :---: | :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements for Bachelor of Science in Data Analytics Physical Sciences Option | Data Analytics - Physical Sciences Option (120 Credits) <br> Students are admitted to the Physical Sciences option upon compl semester credits with a 2.0 GPA . <br> First Year <br> First Term <br> CPT S 115 or STAT 115 <br> CPT S 121 or 131 <br> HISTORY 105 [ROOT] <br> MATH 171 [QUAN] <br> Second Term <br> CHEM 105 [PSCI] <br> CPT S 122 or 132 <br> ENGLISH 101 [WRTG] <br> MATH 172 <br> Second Year <br> First Term | Credits <br> 3 <br> 4 <br> 3 <br> 4 <br> Credits <br> 4 <br> 4 <br> 3 <br> 4 <br> Credits | 8-20 |



|  | Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 <br> CPT S 424 [CAPS] [M] or STAT 424 [CAPS] [M] 3 <br> Foreign Language, if needed, or Electives 6 <br> PHIL 450 3 <br> Electives $\underline{9}$ <br> Footnotes <br> 1 The University requires a minimum of 40 credits at the $300-400$ level. CHEM 330 is recommended, but <br> must be taken concurrently with CHEM 331.  |  |
| :---: | :---: | :---: |
| Mathematics and Statistics Remove CAS requirements and revise graduation requirements for Bachelor of Science in Data Analytics Social Sciences Option | Data Analytics - Social Sciences Option (120 Credits) <br> Students are admitted to the Social Sciences option upon completion of 24 semester credits with a 2.0 GPA . <br> First Year <br> First Term <br> CPT S 115 or STAT 115 <br> CPT S 121 or 131 <br> HISTORY 105 [ROOT] <br> MATH 171 [QUAN] <br> Second Term <br> CPT S 122 or 132 <br> ENGLISH 101 [WRTG] <br> MATH 172 <br> SOC 101 [SSCI] <br> Elective <br> Second Year | 8-20 |



