

## ASSOCIATE OF APPLIED SCIENCE

# COMPUTER SCIENCE AND ENGINEERING

2025-26 Catalog

Effective Summer 2025

5250



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

| CSE229 .N CSE230 A CSE231 Ja CSE232 A CSE233 C CSE234 A | Course Title  Structured Query Language  Net Development  Advanced .Net Development ▲-  ava Programming  Advanced Java Programming  C++ Programming | 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | Pre- and Co-Requisites  CPD121  CSE122  CSE229   | Completed<br>Sem./Year |
|---|---|---------------------------------------|--|------------------------|
| CSE229 .N CSE230 A CSE231 Ja CSE232 A CSE233 C CSE234 A | Net Development  Advanced .Net Development ▲ -  ava Programming  Advanced Java Programming  C++ Programming   | 3<br>3<br>3                           | CSE122<br>CSE229   |                        |
| CSE230 A CSE231 Ja CSE232 A CSE233 C CSE234 A           | Advanced .Net Development A-<br>ava Programming Advanced Java Programming C++ Programming   | 3                                     | CSE229   |                        |
| CSE231 Ja<br>CSE232 A<br>CSE233 C<br>CSE234 A           | ava Programming Advanced Java Programming C++ Programming   | 3                                     |  |                        |
| CSE232 A<br>CSE233 C<br>CSE234 A                        | Advanced Java Programming C++ Programming   |                                       |  |                        |
| CSE232 A<br>CSE233 C<br>CSE234 A                        | Advanced Java Programming C++ Programming   | 3                                     | CSE122   |                        |
| CSE234 A  |   | 5                                     | CSE231   |                        |
| CSE234 A  |   | 3                                     | CSE122   |                        |
| _   | Advanced C++ Programming ▲-   | 3                                     | CSE233   |                        |
| CSE236 D  | Analyzing Software Requirements and Developing Solutions  | 3                                     | (CIS221 or CSE235 or CSE229 or<br>CSE231 or CSE233 or WDD221 or<br>WDD222 or WDD224 or WDD225 or<br>WDD226) and CPD123 |                        |
|   | Select two (2) Technical Electives from the list below³ ▲   | 6                                     | Check for prerequisites  |                        |
|   | Total   | 30                                    |  |                        |
| NON-TECH<br>Course Number                               | Course Title  | Credits                               | Pre- and Co-Requisites   | Completed<br>Sem./Year |
| SSC101 S  | Student Success Seminar^^   | 1                                     | Take first semester  |                        |
| COM121 E  | Effective Speaking  | 3                                     | None   |                        |
| or  | or  | or                                    | or   |                        |
| COM122 Ir   | nterpersonal Communication  | 3                                     | None   |                        |
| or  | or  | or                                    | or   |                        |
|   | Small Group Communication^  | 3                                     | IDS102 or Proficiency  |                        |
| CIS126 F  | Fundamentals of Information Systems^  | 3                                     | IDS102 or Proficiency  |                        |
| CPD121 D  | Data Modeling and Database Design^  | 3                                     | (IDS102 or Proficiency)  and (ITD100 or Proficiency)   |                        |
| CSE122 P  | Programming Logic and Problem Solving^  | 3                                     | (IDS102 or Proficiency)  and (ITD100 or Proficiency)   |                        |
| ENG124 C  | College Composition^  | 3                                     | Co-ENG024 or Co-ENG011 or<br>Proficiency   |                        |
| CSE121 M  | Mobile Development Architecture   | 3                                     | pre-co-CSE122  |                        |
| MTH135 P  | Precalculus^ – A student may take MTH125<br>(College Algebra) and MTH130 (Trigonometry)<br>over two semesters to satisfy this requirement.          | 5                                     | MTH025 or Proficiency  |                        |
| WDD121 Ir   | nternet Design and Development^   | 3                                     | (IDS102 or Proficiency) and (ITD100 or Proficiency)  |                        |
|   | Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>  | 3                                     | Check for prerequisites  |                        |
| Se  | Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>   | 3                                     | Check for prerequisites  |                        |
| <u> </u>  | Total   | 33                                    |  |                        |
|   | TOTAL CREDIT HOURS  | 63                                    |  |                        |

<sup>^</sup>Based upon SSC placement score

Students completing this degree may be eligible to also receive a Computer Science and Engineering - C++ Programming Career Enhancement Certificate (5255), an Artificial Intelligence Career Enhancement Certificate (5248), an Artificial Intelligence Fundamentals Career Enhancement Certificate (5249), a Computer Science and Engineering – Java Programming Career Enhancement Certificate (5257) and a Computer Science Career Enhancement Certificate (5258).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>3</sup>Technical Electives: AIN121, CSE221, CSE226, CSE235, CSE237, MTH214, WDD221, WDD224, WDD225, WDD226

## **COMPUTER SCIENCE AND ENGINEERING**

5250

### PART-TIME STUDENT ADVISING NOTES

### **Academic Advising**

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for part-time associate degree students who plan to finish in eight semesters.

| on in eight semesters.            |  |                           |  |
|-----------------------------------|--|---------------------------|--|
| <u>First Semester</u>             |  | Credit Hours              | Pre- and Co-requisites                   |
| SSC101                            | Student Success Seminar^^                        | 1                         | Take first semester                      |
| CPD121                            | Data Modeling and Database Design^               | 3                         | (IDS102 or Proficiency)                  |
|                                   |  |                           | and (ITD100 or Proficiency)              |
|                                   |  |                           | (IDS102 or Proficiency)                  |
| CSE122                            | Programming Logic and Problem Solving^           | <u>3</u>                  |  |
|                                   |  |                           | and (ITD100 or Proficiency)              |
|                                   |  | 7                         |  |
| Second Semester                   |  |                           |  |
|                                   | Precalculus^- A student may take MTH125 (College |                           |  |
| MTH135                            | Algebra) and MTH130 (Trigonometry) over two      | 5                         | MTH025 or Proficiency                    |
| WITITISS                          |  | 3                         | WITHOUS OF FIORICIENCY                   |
|                                   | semesters to satisfy this requirement.           |                           |  |
| ENG124                            | College Composition^                             | <u>3</u>                  | Co-ENG024 or Co-ENG011 or                |
|                                   |  |                           | Proficiency                              |
|                                   |  | 8                         | Tronciency                               |
| ETI 1.C                           |  | o                         |  |
| Third Semester                    |  |                           |  |
| CIS126                            | Fundamentals of Information Systems^             | 3                         | IDS102 or Proficiency                    |
| CSE229                            | .Net Development                                 | 3                         | CSE122                                   |
|                                   | 1  | 3<br>6                    |  |
| Egyath Composton                  |  | U                         |  |
| Fourth Semester                   |  |                           |  |
| CSE231                            | Java Programming                                 | 3                         | CSE122                                   |
| CSE233                            | C++ Programming                                  | 3                         | CSE122                                   |
|                                   |  | 3<br><u>3</u><br><b>6</b> |  |
| Fifth Semester                    |  | •                         |  |
|                                   | A decree of Net Decrete was not A                | 2                         | CCE220                                   |
| CSE230                            | Advanced .Net Development ▲-                     | 3                         | CSE229                                   |
| CSE232                            | Advanced Java Programming                        | 3                         | CSE231                                   |
| Social and Behavioral             | Sciences Elective <sup>2</sup>                   | 3                         | Check for prerequisites                  |
|                                   |  | $\frac{3}{9}$             |  |
| Sixth Semester                    |  |                           |  |
|                                   | G 10 I   | 2                         | CDD 121                                  |
| CPD123                            | Structured Query Language                        | 3                         | CPD121                                   |
| WDD121                            | Internet Design and Development^                 | 3                         | (IDS102 or Proficiency)                  |
| WDD121                            | internet Design and Development                  | 3                         | and (ITD100 or Proficiency)              |
| COM121                            | Effective Speaking                               | 3                         | None                                     |
| or                                | or   | or                        | or                                       |
|                                   | <del>4-</del>                                    |                           |  |
| COM122                            | Interpersonal Communication                      | 3                         | None                                     |
| or                                | or   | or                        | or                                       |
| COM123                            | Small Group Communication^                       | <u>3</u>                  | IDS102 or Proficiency                    |
|                                   | •  | 9                         | -  |
| Seventh Semester                  |  |                           |  |
| CSE234                            | Advanced C     Ducamanine A                      | 2                         | CSE233                                   |
|                                   | Advanced C++ Programming ▲-                      | 3                         |  |
| CSE121                            | Mobile Development Architecture                  | 3                         | Pre/Co-CSE122                            |
| Technical Elective <sup>3</sup> ▲ |  | <u>3</u>                  | Check for prerequisites                  |
|                                   |  | $\frac{3}{9}$             |  |
| Eighth Semester                   |  |                           |  |
| Eighth Semester                   |  |                           | (CIS221 or CSE235 or CSE229 or CSE231 or |
| CSE226                            | Analyzing Software Requirements and Developing   | 2                         | CSE233 or WDD221 or WDD222 or WDD224     |
| CSE236                            | Solutions  | 3                         |  |
|                                   |  | _                         | or WDD225 or WDD226) and CPD123          |
| Arts & Humanities Ele             | ctive'   | 3                         | Check for prerequisites                  |
| Technical Elective <sup>3</sup> ▲ |  | <u>3</u>                  | Check for prerequisites                  |
|                                   |  | <u>3</u>                  | · ^ •                                    |
|                                   | TOTAL CREDITS                                    | 63                        |  |
|                                   | TOTAL CREDITS                                    | 00                        |  |

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

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