Associate in Arts (A.A.) Degree

Database Development Practitioner

Program Description

The A.A. degree prepares students for an entry-level position in the database field to work as a data analyst, business analyst, database project coordinator or database engineer.

Program Learning Outcomes

Upon completion, students will be able to

- Demonstrate requirement analysis, design and coding skills in languages commonly used in data management with large scale databases
- Apply skills for business analysis to convert data into information in real time, allowing business owners to make effective just-in-time decisions

Associate Degrees (A.A. or A.S.) Requirements

- Completion of all requirements for one of the General Education (GE) patterns listed at deanza.edu/articulation/ge-requirements. Students using the De Anza GE or CSU GE pattern must earn an overall GPA of at least 2.0 for required GE courses. Students using the IGETC pattern must earn a grade of C or higher for each required GE course.
- Completion of all major courses with a C grade or higher. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees). Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.
- Completion of at least 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA (C average). All De Anza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA (C average).

- At least 24 quarter units must be earned at De Anza College

Program Requirements

IMPORTANT NOTE: Some courses have prerequisites; see the college catalog for more information.

IMPORTANT NOTE: Some courses have a cross-listed and/or honors version. Students will receive credit for only one version of the course.

Required Core - Complete one option: (9 Units)

Option 1: (9 Units)

Course	Title	Units
CIS 22A	Beginning Programming Methodologies in C++	4.5
CIS 22B / CIS 22BH	Intermediate Programming Methodologies in C++ **or** Intermediate Programming Methodologies in C++ - HONORS	4.5

Option 2: (9 Units)

Course	Title	Units
CIS 36A	Introduction to Computer Programming Using Java	4.5
CIS 36B	Intermediate Problem Solving in Java	4.5

Option 3: (9 Units)

Course	Title	Units
CIS 41A	Python Programming	4.5

Course	Title	Units
CIS 41B	Advanced Python Programming	4.5

List A: (17 - 17.5 Units)

Course	Title	Units
CIS 44A	Database Management Systems	4.5
CIS 44F	Introduction to Big Data and Analytics	4
CIS 64B	Introduction to SQL	4.5
CIS 64C	Introduction to PL/SQL	4.5
CIS 64E	Fundamentals of Large Scale Cloud Computing	4

List B: (9 Units)

Course	Title	Units
CIS 9	Introduction to Data Science	4.5
CIS 44H	R Programming	4.5
CIS 64G	Data Visualization Methodology and Tools	4.5

List C: (9 Units)

Course	Title	Units
CIS 18A	Introduction to Unix/Linux	4.5
CIS 18B	Advanced UNIX/LINUX	4.5

Additional completion of one of the following general education patterns: De Anza General Education, CSU General Education Breadth (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC) AND electives as needed to reach at least 90 units

Major Required: 44-44.5 Units

Total Required: 90 Units