







Computer and Information Science (B.S.C.I.S.) Transfer Pathway for Foothill College Software Engineering Emphasis Track

Transferring Made Simple. The Transfer Pathways program eliminates the obstacles with the transition from the Community College to the Bachelor of Science (BS) in STEM (Science, Technology, Engineering and Mathematics) programs at Notre Dame de Namur University (NDNU).

NDNU accepts transfer students for both spring and fall terms with any number of units. Our counselors and advisors will work with you to determine an individualized academic plan to map out and get you into the classes you need to graduate on time. Students seeking a 2 + 2 transfer agreement can use this pathway document as a guide. Please keep in mind that not every course at Foothill College needs to be completed prior to coming to NDNU. We will assist you to determine your individual needs.

Articulation Pathway toward a B.S.C.I.S., Software Engineering Track The following courses are recommended to streamline the path through prerequisite courses taken at Foothill College, and specific upper division courses that must be taken at NDNU for the CIS major. The pathway is a guide to students who enter NDNU during the 2014-15 year. If you will be starting at a later date, please remain in contact with the NDNU CIS department and your advisor, to be aware of any potential changes in the major requirements over time.

General Education Requirements

You should plan to complete at least 28 units from the online Articulation Agreement between Foothill College and NDNU, including both required Core Cultural Diversity courses. The total number of units needed to fulfill all Core Curriculum and institutional requirements will vary depending on how requirements for foreign language and US History are met. Please contact us to confirm your intended transfer pathway.

(Over for courses to be taken at NDNU)

Contact Information

NDNU Admissions (650) 508-3600 admiss@ndnu.edu ndnu.edu/STEMpathways

Dr. Eugen Radian Chair, Math & Computer Science Dept. (650) 508-3539 eradian@ndnu.edu

Dr. John Youssefi Professor and Program Director, Computer Science (650) 508-3450 jyoussefi@ndnu.edu

Jeff Day Admin. Coordinator Math & Computer Science Dept. (650) 508-3472 jday@ndnu.edu

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Prerequisites for Courses in the NDNU Major. (Recommended taking at Foothill College)

| | | <u>Quarter Units</u> |
|------------------|--|----------------------|
| CS 1B | Intermediate Software Design in JAVA | (5) OR |
| CS 2B | Intermediate Software Design in C++ | (5) |
| CS 1C | Adv. Data Structures & Algorithims in JAVA | (5) OR |
| CS 2C | Adv. Data Structures & Algorithims in C++ | (5) |
| MATH 1A | Calculus | (5) |
| MATH 1B | Calculus | (5) |
| CS 10 or ENGR 12 | Computer Architecture & Organization | (5) |

Courses Remaining at NDNU: CIS Major Courses: 48 Units Total

Probability & Statistics

MTH 2522

CIS 2355

CIS 2886

Semester Units (4) (4)

| MTH 2419 | Discrete Mathematics | (4) | | |
|--|--|------|--|--|
| CIS 2233 | Database Management Systems | (3) | | |
| CIS 2235 | Computer Operating Systems | (4) | | |
| CIS 2243 | Computer Network & Network Programming | (4) | | |
| CIS 2245 | Software Engineering | (3) | | |
| CIS 2277 | Web Programming I: Client Side | (3) | | |
| CIS 2278 | Web Programming II: Server Side | (3) | | |
| CIS 2341 | Quality Assurance & Testing | (3) | | |
| CIS 2885 | Senior Project | (3) | | |
| | | | | |
| Select two from the following courses: (8 units total) | | | | |
| CIS 1150 | Computer Organization | (4)* | | |
| CIS 2211 | Algorithms & Complexity | (4) | | |
| CIS 2221 | Programming Languages & Compiler | (4) | | |
| MTH 2450 | Linear Algebra | (4) | | |
| | | | | |
| Select two from the following courses: (6 units total) | | | | |
| CIS 2255 | Computer Graphics | (3) | | |
| CIS 2261 | Object-Oriented Design & Programming | (3) | | |

st Students who transfer CS 10 or ENGR 12-Computer Architecture and Organization from Foothill College will receive content credit for CIS 1150 at NDNU.

(3)

(3)

| Additional GE Courses: | (9 units minimum) |
|-------------------------|--|
| Upper Division Writing | (3)* |
| Upper Division Religion | (3) |
| Community Engagement | (3)* |
| Cultural Diversity | (6) if not completed at Foothill College |

Any remaining GE or institutional courses as needed to fulfill all NDNU Requirements.

Mobile Device Programming

Special Topics in Computer Science

^{*} The Upper Division Writing requirement and the Community Engagement requirement generally do not add units to a student's program. Rather, they are intended to be fulfilled by choosing courses from the approved list that also satisfy requirements in other areas of the student's program.