



DEGREE WORKSHEET FOR:

Software Engineering

2017-2018 Catalog

Degree Requirements – 120 credits

| YEAR 1- FALL (14 credits) | | YEAR 1- SPRING (16 credits) | |
|---|-----|--|-------------|
| BACS 180 Introduction to Software Engineering | 1 | MATH 132 Calculus II | 4 |
| CG 120 Computer Programming | 3 | CS 102 Structured Programming | 3 |
| MATH 131 Calculus I (LAC 2) | 4 | STAT 150 Introduction to Statistical Analysis (LAC 2) | 3 |
| ENG 122 College Composition (LAC 1a) | 3 | ENG 123 College Research Paper (LAC 1b)OR | 3 |
| Liberal Arts Core: Area 3 Arts and Humanities | 3 | SCI 291 Scientific Writing (LAC 1b) | 3 |
| | | Liberal Arts Core: Area 5 Social and Behavioral Science | 3 |
| YEAR 2- FALL (14 credits) | | YEAR 2-SPRING (16/17 credits) | |
| CS 200 Object-Oriented Design & Programming | 3 | BACS 200 Web Design & Development for Small Businesses | 3 |
| MATH 228 Discrete Mathematics | 3 | BACS 287 Graphical Interface Programming | 3 |
| PHYS 220 Introductory Physics I (LAC 6) OR | 5 | CS 301 Algorithms and Data Structures | 3 |
| PHYS 240 General Physics I (LAC 6) | 5 | BIO 110 Principles of Biology with Lab (LAC 6) OR | 4 <i>or</i> |
| Liberal Arts Core: Area 3 Arts and Humanities | 3 | CHEM 111 Principles of Chemistry with Lab (LAC 6) | 5 |
| | | Liberal Arts Core: Area 4 History | 3 |
| YEAR 3- FALL (15-18 credits) | | YEAR 3- SPRING (15 credits) | |
| BACS 380 Network & Data Communication Systems | 3 | BACS 300 Information Systems | 3 |
| BACS 350 Intermediate Web Development | 3 | BACS 385 Fundamentals of Project Management | 3 |
| CS 350 Software Engineering I | 3 | Software Engineering Major Elective (See note) | 3 |
| MATH 350 Elementary Probability Theory | 4 | Liberal Arts Core: Area 8 Multicultural Studies | 3 |
| University Wide Elective | 2-5 | Liberal Arts Core: Additional Area 3 or Area 5(different subgroup) | 3 |
| YEAR 4- FALL (15-17 credits) | | YEAR 4- SPRING (12 credits) | |
| BACS 485 Database Management Systems | 3 | BACS 488 Senior CIS Project OR | 3 |
| BACS 487 Systems Analysis & Design | 3 | CS 497 Senior Project | 3 |
| BACS 383 User Interface Design & Development | 3 | CS 440 Operating Systems OR | 3 |
| Liberal Arts Core: Area 7 International Studies | 3-5 | CS 442 Networking | 3 |
| University Wide Elective | 3 | Software Engineering Major Elective (See note) | 3 |
| | | University Wide Elective | 3 |

Admission Requirement – Incoming freshman admission standards are based on the Colorado Commission of Higher Education (CCHE) composite index, which is a sliding scale based on achievement test score and high school rank. Current admission standards are available at www.mcb.unco.edu or by calling the MCB Advising Center at 970.351.1233. Transfer and current UNC students with at least a 3.0 cumulative GPA and 15 completed hours can be admitted to the major automatically. Some students may qualify to apply for admission to a Business major or minor. These students include: Transfer students with at least 15 hours with a cumulative GPA of 2.5-2.99 and UNC students who have completed a total of 15 hours with a cumulative UNC GPA of 2.5-2.99.

Minor Required – No minor is required.

*This worksheet is a recommended schedule to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; have at least 40 credit hours in courses designated as Liberal Arts Core; meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation. **Students must consult with their major advisor to receive information on any additional graduation requirements.***

Contact Information – Software Engineering/Monfort College of Business

Kepner 2090 and (970)351-2855

Web Page: <http://mcb.unco.edu/Programs/SoftwareEngineering/>

Notes

1. A student must attain a 2.0 or greater cumulative GPA in the required major and specific LAC courses. Each student must attain at least a "C-" grade in each required major and specific LAC course, except where specified that a "C" is required.
2. At least 44 credit hours of the degree must be earned at UNC. At least 50 % of the Required Major credits in Software Engineering must be earned at UNC.
3. No more than 20 credits from the Major requirements may be transferred in from another institutions. Of the 20 credits, no more than 9 of these credits may be transferred in from other institutions at the 300/400 level.
4. Software Engineering Major Electives: Take six (6) semester credit hours from any 300 or 400 level BACS or CS course not otherwise required for the major.
5. Some of the upper level Software Engineering courses are offered in only one semester each year. You are required to meet with your Software Engineering faculty advisor each semester to make certain you are on schedule.
6. University Wide electives. Complete additional credits to achieve the minimum credits needed for this degree, that will typically be 8 credits.
7. Students must meet course prerequisites as stated in the current UNC catalog. Be sure to check the catalog each semester to make sure you meet the prerequisite requirements.