BS in Computer Science [Spring 2023]

· Arrows indicate prerequisite course(s)·
· All courses are 3 credit hours unless otherwise indicated·
· Shaded courses are Computing common core courses
· Rounded corner courses are taught by other departments·
· **48** · upper level hours and · **120** · total hours are required for graduation
· Pattern of typical offering: F=Fall, S=Spring, Su=Summer (subject to change)
· **Exit Requirement**· : Must give spoken presentation in 3XXX or 4XXX computing courses.

Requisites & Prerequisites (28 cr. hrs.)

MAC1147

MAC 2311 Calculus I (4)

PHY 2048C Univ Physics I with Lab (4)

PHY 2049/2049L Univ Physics II with Lab (4)

MAC 2312 Calculus II (4)

SPC Speech or Public Speaking

Science for science major

Science for science major

COP 2220 Programming I (F, S, Su)

STA 3032 Prob and Stats for Engin

MAS 3105 Linear Algebra (4)

Common Core & Major Requirements (50 cr. hrs.)

MAC1101 or (MAC1105 or MAC1147)

COT 3100 Computational Structures (F, S, Su)

CIS 3253 Legal & Ethical Issues in Cmptng GW (F, S, Su)

COP 3503 Programming II (F, S, Su)

CDA 3100 Computer Org & Arch (4) (S)

COT 3210 Theory of Computation (F)

COP 3530 Data Structures (F, S, Su)

CNT 4504 Computer Networks (F, S, Su)

COP 3703 Intro to Databases (F, S, Su)

COP 3404 Systems Programming (F)

COP 4620 Constr of Lang Translators (S)

CEN 4010 Software Engineering (S)

COT 4400 Design & Analysis of Algorithms (F)

CAP 4630 Intro to Artificial Intelligence (S)

COP4610 Operating Systems (S)

Major Electives (9 cr. hrs.)

Select 9 credits of the following

Any 3XXX or 4XXX CAP/CDA/CEN/CIS/ CNT/COP/COT

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Computer Science Class Flowchart.
BS in Computer Science [Spring 2023 Catalog]

- Requisites & Prerequisites – (7) (25 credit hours)
- All courses are 3 credit hours unless otherwise indicated
- 48 upper level hours and 120 total hours are required for graduation
- Exit Requirement: Must give a spoken presentation in 3XXX or 4XXX Computing courses.

- Speech or Public Speaking (SPC prefix); taught by another department
- Science for Science major; taught by another department
- Science for Science major; taught by another department
- MAC2311 Calculus I; 4 credits; taught by another department; Prerequisites: MAC1147
- MAC2312 Calculus II; 4 credits; taught by another department; Prerequisites: MAC2311 Calculus I
- PHY2048C; 4 credits or PHY2048/2048L University Physics I with Lab; 5 credits; taught by another department; Prerequisites: MAC2311 Calculus I PHY2048C satisfies lecture and lab requirement.
- PHY2049/2049L University Physics I with Lab; 4 credits; taught by another department; Prerequisites: PHY2049/2049L and MAC2312
- COP2220 Programming I; fall, spring and summer
- COT3100 Computational Structures; fall, spring and summer; Computing Common Core; Prerequisites: MAC1101 or MAC1105 or MAC1147
- CIS3253 Legal & Ethical Issues in Computing; fall, spring and summer; Computing Common Core; Prerequisites: COP2220 Programming I
- COP3503 Programming II; fall, spring and summer; Computing Common Core; Prerequisites: COP2220 Programming I
- CDA3100 Computer Org & Arch; 4 credits; spring; Prerequisites: COP2220 Programming I
- COT3210 Theory of Computation; fall; Prerequisite: COT3100 Computational Structures
- COP3530 Data Structures; fall, spring and summer; Prerequisites: COT3100 Computational Structures and COP3503 Programming II
- CNT4504 Computer Networks; fall, spring and summer; Computing Common Core; Prerequisites: COP3503 Programming II
- COP3703 Intro to Databases; fall, spring and summer; Computing Common Core; Prerequisites: COP3503 Programming II
- COP3404 Systems Software; fall; Prerequisites: CDA3100 Computer Org & Arch and COP3503 Programming II
- COP4620 Constr of Lang Translators; spring; Prerequisites: COT3210 Theory of Computation and COP3530 Data Structures
- CEN4010 Software Engineering; spring; Prerequisites: COP3530 Data Structures and COP3703 Intro to Databases
- COT4400 Design & Analysis of Algorithms; fall; Prerequisites: COP3530 Data Structures
- CAP4630 Intro to Artificial Intelligence; spring; Prerequisites: COP3530 Data Structures
- COP4610 Operating Systems; spring; Prerequisites: COP3530 Data Structures and COP3404 Systems Software
- Electives: Any 9 credits at the 3XXX or 4XXX level with the following prefixes: CAP, CDA, CEN, CIS, CNT, COP or COT