


BS in Computer Science - Software Entrepreneurship Applied Option

SAMPLE CURRICULUM 2023-2024

FIRST YEAR

SECOND YEAR

FALL	WINTER	SPRING	FALL	WINTER	SPRING
ENGR 100 (3 cr) The OSU Engineering Student	ENGR 102 (3 cr) Design Engineering and Problem Solving	ENGR 103 (3 cr) Engineering Computation and Algorithmic Thinking <small>Preq: ENGR 102 & MTH 112Z</small>	CS 162 (4 cr) Intro to Computer Science II <small>Preq: ENGR 103 or CS 161</small>	CS 261 (4 cr) Data Structures <small>Preq: CS 162 & MTH 231</small>	CS 325 (4 cr) Analysis of Algorithms <small>Preq: CS 261 & MTH 231</small>
MTH 111Z (4 cr) Precalculus I: Functions <i>(Taught Fall, Winter & Summer)</i> <small>Preq: MTH 095 or MTH 103 or placement</small>	MTH 112Z (4 cr) Precalculus II: Trigonometry <i>(Taught Winter & Summer)</i> <small>Preq: MTH 111Z</small>	MTH 231 (4 cr) Discrete Math <small>Preq: MTH 111Z</small>	BA 260 (4 cr) Introduction to Entrepreneurship <i>(Taught Fall, Spring)</i> <small>Preq: Sophomore standing</small>	CS 340 (4 cr) Introduction to Databases <small>Preq: CS 290 (request pre-req override)</small>	CS 290 (4 cr) Web Development <small>Preq: CS 162</small>
WR 121Z (4 cr) Composition I <i>(Taught Fall, Winter, Spring)</i>	WR 214 (3 cr) Writing in Business <i>(TBD)</i> <small>Preq: WR 121Z</small>	WR 227Z (4 cr) Technical Writing <i>(Taught Winter, Spring & Summer)</i> <small>Preq: WR 121Z</small>	MTH 251 (4 cr) Differential Calculus <i>(Taught Fall, Winter & Summer)</i> <small>Preq: MTH 112Z</small>	MTH 252 (4 cr) Integral Calculus <i>(Taught Winter, Spring & Summer)</i> <small>Preq: MTH 251</small>	ST 314 (3 cr) Intro to Statistics for Engineers <i>(Taught Spring, & Summer)</i> <small>Preq: MTH 252</small>
PERSPECTIVE Physical Science <i>(see bacc core guide)</i>	PERSPECTIVE Additional Science (Physical or Biological) <i>(see bacc core guide)</i>	COMM 111Z (4 cr) Public Speaking <i>(Taught Fall, Winter)</i> or COMM 114 (3 cr) Argument & Critical Discourse <i>(Taught Spring)</i>	CS 391 (3 cr) Social and Ethical Issues in CS <small>SYNTHESIS Science, Technology & Society</small> <small>Preq: CS 101 or computer literacy</small>	PERSPECTIVE Social Processes & Institutions ECON 201 (4 cr) Intro to Microeconomics <i>(Taught Fall, Winter)</i>	PERSPECTIVE Biological Science <i>(see bacc core guide)</i>
HHS 231 (2 cr) Lifetime Fitness for Health <i>(Taught Fall, Winter, Spring)</i> & HHS 241 or PAC (1 cr) <i>(All)</i>		PERSPECTIVE Literature & Arts <i>(see bacc core guide)</i>			

NOTES:  Shaded courses are part of the CS Applied Option's requirements and electives.

 MTH courses not required for CS major but are MTH Course pre-reqs.

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THIRD YEAR

FOURTH YEAR

FALL	WINTER	SPRING	FALL	WINTER	SPRING
<div>CS 361 (4 cr) Software Engineering I</div> <div>Preq: CS 261</div>	<div>CS 362 (4 cr) Software Engineering II</div> <div>Preq: CS 261 (CS 361 recommended)</div>	<div>Applied Option Elective BA 315 (4 cr) Accounting for Decision Making</div> <div>Preq: Junior Standing</div>	<div>CS 461 (3 cr) Senior Software Engineering Project (WIC)</div> <div>Preq: CS 361, CS 325, & CS 362. Co-req: CS 466</div>	<div>CS 462 (3 cr) Senior Software Engineering Project (WIC)</div> <div>Preq: CS 362, CS 461</div>	<div>CS 463 (2 cr) Senior Software Engineering Project</div> <div>Preq: CS 462</div>
<div>CS 271 (4 cr) Computer Architecture & Assembly Language</div> <div>Preq: ENGR 103 or CS 161</div>	<div>CS 374 (4 cr) Operating Systems I</div> <div>Preq: CS 261, CS 271, & C programming</div>	<div>CS 474 (4cr) Operating Systems II</div> <div>Preq: CS 344 & CS 271</div>	<div>CS 466 (4 cr) Web-based Start-up Project</div> <div>Preq: Co-requisite: CS 461</div>	<div>CS 492 (4 cr) Mobile Software Development</div> <div>Preq: CS 344</div>	<div>Applied Option Elective BA 360 (4 cr) Intro. to Financial Management <i>(Taught Fall & Spring)</i></div> <div>Preq: BA 315, ECON 201</div>
<div>CS 352 (4 cr) Introduction to Usability Engineering</div> <div>Preq: ENGR 103 or CS 161</div>	<div>CS 381 (4 cr) Programming Language Fundamentals</div> <div>Preq: CS 261 & MTH 231</div>	<div>PERSPECTIVE Cultural Diversity <i>(see bacc core guide)</i></div>	<div>CS 372 (4 cr) Introduction to Computer Networks</div> <div>Preq: CS 261, CS 271, C programming, & Unix</div>	<div>CS 478 (4 cr) Network Security</div> <div>Preq: CS 372</div>	<div>Applied Option Elective CS 493 (4 cr) Cloud Application Development</div> <div>Preq: CS 290, CS 340, & CS 372</div>
<div>Applied Option Elective BA 352 (4 cr) Managing Individual & Team Performance <i>(Taught Fall & Spring)</i> or BA 351 online</div> <div>Preq: COMM 111Z or 114, WR 214 or 227Z, & Junior Standing</div>	<div>PERSPECTIVE Western Culture <i>(see bacc core guide)</i></div>	<div>PERSPECTIVE Difference, Power & Discrimination <i>(see bacc core guide)</i></div>	<div>Upper Division Restricted Elective</div> <div>CS 434 (4cr) Machine Learning & Data Mining (preq: CS 325 & ST 314)</div>	<div>SYNTHESIS Contemporary Global Issues <i>(see bacc core guide)</i></div>	<div>Upper Division Restricted Elective</div> <div>CS 475 – Intro. to Parallel Programming (preq: CS 261))</div>

- NOTES:**
- Courses may not be offered in the term shown in future years. Students should check with their advisor about upcoming changes.
 - Restricted Electives (RE): Required to complete two upper division restricted electives. Students should check with their advisor on upper division restricted elective course offerings.