From:	Smith, Randy
To:	Agrawal, Shereen; Arora, Anish; Machiraju, Raghu; Ramnath, Rajiv
Cc:	Sutherland, Sue; Marzette, Russell; Smith, Randy; Griffiths, Rob; Reed, Katie; Croxton, Keely; Chandrasekaran, Aravind; Matyas, Cory; Tomasko, David; Howard, Ayanna; Hammond, Ivy; Gardner, Jared; Williams, Valarie; Watson, Sara; Poth, Jody; Talbot, Ann; Leonardi, Kevin; Brown, Trevor; Bellamkonda, Ravi V.
Subject:	Proposal to establish a Bachelor of Science in Computer Science and Business
Date:	Wednesday, April 8, 2026 5:59:50 PM
Attachments:	image001.png

Shereen, Anish, Raghu, and Rajiv:

The proposal to establish an interdisciplinary Bachelor of Science in Computer Science and Business degree, conferred by the Fisher College of Business, was approved by the Council on Academic Affairs at its meeting on April 8, 2026. Thank you for attending the meeting to respond to questions/comments.

The proposal will now be sent to the University Senate with a request to be included for action at the Senate meeting on **April 23, 2026**. The Chair of the Council will present the proposal, but we will need you or a designee to attend to respond to detailed questions. Prior to that it will need discussion at the Faculty Council on **April 9, 2026** and the Senate Steering Committee on **April 16, 2026**. I will provide you with details as I receive them.

If approved by the Senate, the proposal will be sent to the Board of Trustees for action at its meeting on **May 21, 2026.**

My office will work with you on the approval process with the Ohio Department of Higher Education.

The Office of the University Registrar will work with you on any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Sue Sutherland (.43), or me.

I wish you success with this important program development.

Randy

THE OHIO STATE UNIVERSITY

W. Randy Smith, Ph.D.
Vice Provost for Academic Programs
Office of Academic Affairs
University Square South, 15 E. 15th Avenue, Columbus, OH 43201
614-292-5881 Office

smith.70@osu.edu
Assisted by:
Katie Reed
Executive Assistant
(614) 292-5672

From:	Marzette, Russell
To:	Reed, Katie
Subject:	FW: Follow Up Questions -Bachelor of Science in Computer Science and Business
Date:	Wednesday, April 8, 2026 7:45:26 AM
Attachments:	image001.png Follow up questions from CAA v2.pdf Attachment 1 Syllabi for Required Courses.pdf

Katie,
This follow information should be added to the package the full committee is reviewing today. The responses deemed to have addressed the subcommittees questions.
Rkm.

To collaborate or dialogue further, schedule time via https://calendly.com/russell_k_marzette_jr

THE OHIO STATE UNIVERSITY

Mr. Russell K. Marzette Jr., M.S.
Assistant Professor of Practice
College of Engineering
Department of Mechanical and Aerospace Engineering
Scott Laboratory, 201 W. 19th Ave, Columbus, OH 43210
(614) 688-2919 Office / (614) 398-1405 Mobile
marzette.1@osu.edu mae.osu.edu

From: Agrawal, Shereen <agrawal.313@osu.edu>
Sent: Monday, April 6, 2026 3:18 PM
To: Marzette, Russell <marzette.1@osu.edu>; Dotson, Jeff <dotson.83@osu.edu>; Machiraju, Raghu <machiraju.1@osu.edu>; Morris, Jeremy <morris.343@osu.edu>; Croxton, Keely <croxton.4@osu.edu>
Cc: Hooker, Neal <hooker.27@osu.edu>
Subject: Re: Follow Up Questions -Bachelor of Science in Computer Science and Business

Hi Russell and Neal,

Please see attached for 1) responses to your questions and 2) an attachment of the syllabi for the required courses. Please let us know if you need anything else at all!

Russell, I look forward to speaking with you shortly!

Shereen

Shereen Agrawal
The Ohio State University

Executive Director, Center for Software Innovation
Associate Vice President, Student Innovation and Entrepreneurship

Assisted by Angela Adams | adams.2745@osu.edu

From: Agrawal, Shereen <agrawal.313@osu.edu>
Date: Sunday, April 5, 2026 at 11:00 AM
To: Marzette, Russell <marzette.1@osu.edu>, Dotson, Jeff <dotson.83@osu.edu>, Machiraju, Raghu <machiraju.1@osu.edu>, Morris, Jeremy <morris.343@osu.edu>, Croxton, Keely <croxton.4@osu.edu>
Cc: Hooker, Neal <hooker.27@osu.edu>
Subject: Re: Follow Up Questions -Bachelor of Science in Computer Science and Business

+ Jeff, Raghu, Jeremy, and Keely

Hi Russell,

Thank you for your review of our proposal and your questions! We will get written answers to you asap- working on it now. I will also put time on our calendars to discuss.

Shereen

Shereen Agrawal
The Ohio State University
Executive Director, Center for Software Innovation
Associate Vice President, Student Innovation and Entrepreneurship

Assisted by Angela Adams | adams.2745@osu.edu

From: Marzette, Russell <marzette.1@osu.edu>
Date: Saturday, April 4, 2026 at 8:17 PM
To: Agrawal, Shereen <agrawal.313@osu.edu>
Cc: Hooker, Neal <hooker.27@osu.edu>
Subject: Follow Up Questions -Bachelor of Science in Computer Science and Business

Shereen,

Subcommittee C of CAA has received and reviewed your team's proposal for the Bachelor of Science in Computer Science and Business.

We have a few follow up questions we would like to discuss prior to full CAA review.

1. It is always difficult to align credit hours with number of physical internship hours. With that in mind, how will 1-3 hours of part-time work be determined?

2. Can you please provide a more detailed description of the courses, their objectives, and intended outcomes, and tie this into the overall program?

3. What is the overall impact (if any) to other programs within the colleges?

4. What is the expected effort to ensure that all students can obtain a co-op long term?

   Is the additional staffing adequate? Are any additional resources needed long term?

5. Can you speak more to accreditation.

   What steps were taken to fully align the program with AACSB?

   For clarity can talk through the choice to opt for AACSB vs. ABET accreditation for the degree?

   Was this just based upon the college home choice?

They can be answered verbally in a short meeting if you like or by written response.

If you desire a quick meeting, please use the link below to schedule some time.

_____

To collaborate or dialogue further, schedule time via https://calendly.com/russell_k_marzette_jr

THE OHIO STATE UNIVERSITY

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Assistant Professor of Practice
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Exhibit 1: Course descriptions, objectives, intended outcomes, and tie it to the overall program
Attachment 1: Syllabi for major core and specialization required courses

1. **It is always difficult to align credit hours with the number of physical internship hours. With that in mind, how will 1-3 credit hours of part-time work be determined?**

We plan for 1 credit hour to be equivalent to 10 hours of work per week. When the degree proposal is sent to ODHE, we will verify that these numbers and calculations are allowable under ODHE as well, and that they match past documentation and guidance.

2. **Can you please provide a more detailed description of the courses, their objectives, and intended outcomes, and tie this into the overall program?**

Yes! Putting that at the end of this document.

3. **What is the overall impact (if any) on other programs within the colleges?**

This program is intended to contribute to Ohio State's further competitiveness in being able to attract strong students who are interested in working in technology companies in strategic roles such as product management. Therefore, the proposed B.S. in Computer Science and Business is expected to have a net positive and complementary impact on existing programs across the Fisher College of Business, the College of Engineering, and related units, rather than a disruptive or resource-dilutive effect. We expect that this program will aid in Ohio State getting more of the students who might otherwise choose a program such as Berkeley's MET program to choose Ohio State.

Impact on Computer Science and Engineering Programs- We do not anticipate a negative impact on the traditional B.S. in Computer Science or related CSE degree pathways. The proposed degree is intentionally designed for a distinct student profile- students interested in

applied software development and AI in the context of product development, commercialization, and business operations, rather than students seeking deep theoretical or research-oriented computer science preparation.

While some students who might otherwise pursue Computer Science or Computer Information Systems may elect this new major, this shift is expected to be strategic. The program preserves core CSE rigor and draws heavily on existing CSE courses, meaning instructional demand remains aligned with current offerings and staffing models. Importantly, students seeking depth in areas such as advanced algorithms, theory, machine learning research, or doctoral preparation are expected to continue to select the traditional Computer Science major, which remains the most appropriate pathway for those goals.

Over time, this clearer differentiation between programs is expected to reduce misalignment between student interests and degree selection, allowing CSE to more precisely serve both deeply technical students and applied, interdisciplinary “builder” profiles through distinct but complementary pathways via the department’s emerging CS + X model.

Impact on Business Programs- Within the Fisher College of Business, the new degree is expected to expand the college’s portfolio without displacing existing specializations. The B.S. in Computer Science and Business serves a student population seeking substantially deeper technical computing preparation than is typical within traditional business majors, while still grounding that preparation in business fundamentals.

Students currently pursuing business majors supplemented by a computer science minor—or vice versa—are a strong indicator of unmet demand for an integrated, single-degree pathway. By consolidating this pattern into a purpose-built degree, the program improves efficiency for students while reducing the need for excess credit accumulation through double majors or minors.

Impact on Interdisciplinary and Honors Programs- The program is designed to be complementary to existing interdisciplinary offerings, including the Integrated Business and Engineering- Software Innovation (IBE-SI) honors program. IBE-SI remains a highly selective, cohort-based honors experience that allows students to remain fully anchored in either an engineering or business major and accepts 36 incoming students per year due to the honors distinction. In contrast, the proposed degree is non-honors, scalable, and intentionally structured as a single integrated major.

We expect the B.S. in Computer Science and Business to broaden access to interdisciplinary education rather than compete directly with IBE-SI. Enrollment patterns and student demand will be monitored, and if needed, program leaders will coordinate with IBE leadership to ensure ongoing alignment across pathways.

Resource and Enrollment Considerations- Because the program leverages planned faculty hiring and CSI-funded faculty positions, we do not anticipate adverse impacts to course

availability or instructional quality in existing programs. Governance through a joint oversight committee ensures cross-college coordination, proactive enrollment management, and responsiveness to any emerging capacity concerns.

4. **What is the expected effort to ensure that all students can obtain a co-op long term?**

   Is the additional staffing adequate? Are any additional resources needed long term?

We have a few channels and staffing that will be supporting both securing job opportunities for the students as well as ensuring student success in the co-op roles:

- **Dedicated resources:** Currently in the Center for Software Innovation, we have a director of engagement and development who is already starting to source co-op/internships for students and will continue to do this as part of the role responsibilities. We will additionally be hiring:
  - **Corporate partnerships analyst/manager-** This person will be fully dedicated to identifying and securing new co-op opportunities and working closely with the students. If needed, we will use the stated philanthropic funds to support the additional role.
  - **Co-op manager-** We will be hiring a co-op manager who will be focused on ensuring student success and strong experience in the co-op as well as coordination with the faculty to ensure strong learning outcomes.
- **Partnered resources:** Internally, we have strong partnerships with the Corporate and Foundation Engagement team who we have already started working with on bringing these opportunities to corporates.
- **External help:** The CSI advisory council, their network, and other external supporters we will also engage to support finding opportunities.

Because we understand that securing these types of opportunities is an essential component of the program, this upcoming academic year we are building up our capacity and processes for securing paid, part-time work opportunities for students (they are not planned for credit until this new degree program launches). We already have verbal commitments from Honda, Wexner Medical Center, RWX, OH.io, and in process with others on roles for students. In many cases, it is for multiple roles per company.

For general staffing needs, we will continue to evaluate and monitor the staffing needs to deliver on the program experience. As an example, we may require more academic advising support than what is listed. In these cases, we plan to use the philanthropic funds outlined to support these costs.

5. Can you speak more to accreditation?

   What steps were taken to fully align the program with AACSB?

   For clarity can talk through the choice to opt for AACSB vs. ABET accreditation for the degree?

   Was this just based upon the college home choice?

To clarify, this new degree will not seek any specialized accreditation. Overall, it will be under the Higher Learning Commission (HLC).

The Fisher College of Business has AACSB accreditation at the college level and, given that the number of required business courses in the degree is variable depending on the specialization track selected, we will be requesting to AACSB that this program is out of scope.

Regarding ABET, given the intended knowledge, skills, and career outcomes for this degree, in roles such as product management, business analyst, product marketing, software engineer, technical sales, devops, ABET was deemed as not necessary for these post-graduate pathways. The targeted post-graduation roles typically do not require ABET accreditation. However, we will continue to monitor employers and the market and be responsive to changes in need here.

Exhibit 1: Course descriptions, objectives, and intended outcomes, and tie it to the overall program

The overall program is designed to provide the breadth of foundational knowledge to all students for operating effectively within technology organizations, as well as depth through specializations that make them experts in computer science, specifically in software engineering with AI, and go-to-market. This follows a T-shaped skill set of breadth and depth.

Courses in the major core are below. Overall, this “blended core” was designed by looking at the core foundational computer science and business courses required for most students in those programs. The core design preserves the pedagogy of the design of the CS and business programs but purposefully adds in the real-life example context of situations in technology companies.

Course syllabi for required courses are in the attachment.

Course	Objectives and Learning Outcomes

***BUSADMXXXX- Foundations of Tech Innovation I**	Introduces opportunity discovery, customer validation, and business model design through a compressed, project-based format. Teams develop validated problem statements,test solution viability, and produce minimum viable product (MVP) specifications ready for development. This is a new course that is going through course approvals- syllabus in the attachment
Tie-in: This course anchors the program's emphasis on problem discovery and value creation at the intersection of technology and business. It establishes a common language across students with different technical backgrounds and prepares them to translate customer, market, and operational insights into technically feasible product concepts. By emphasizing experimentation, ambiguity, and early validation, the course lays the foundation for subsequent software development, systems, and go-to-market coursework, reinforcing the program's goal of producing graduates who can connect technical decisions to business outcomes.	
***BUSADMXXXX- Foundations of Tech Innovation II**	Develops product development and go-to-market execution skills through hands-on MVP construction and growth strategy implementation. Teams launch live products, generate measurable traction, and present investor-ready pitches with commercialization strategies. This is a new course that is going through course approvals- syllabus in the attachment
Tie-In: Building directly on Foundations I, this course advances the program's applied learning model by moving students from validated concepts to execution and launch. The course reinforces systems thinking, cross-functional collaboration, and iterative development—competencies essential for operating within technology organizations. It intentionally bridges technical implementation with commercialization strategy, reinforcing the program's core objective of preparing students to build, assess, and scale technology-enabled products. Students will leave Foundations of Tech Innovation I and II prepared for their co-op and project work	
***BUSFIN3XXX Finance in Emerging Technology**	This course has not yet been created, but will largely be based on FIN3120: Foundations of Finance, covering time value of money, financial statements, risk and return, investment valuation, net present value and key management topics while putting these concepts in the context of technology and entrepreneurial situations. The syllabus for FIN3120 is in the attachment, but it will be adjusted as the new course is created.
Tie-in: This course supports the program's goal of developing technology-fluent decision makers by equipping students to evaluate technical and product choices through a financial lens. By contextualizing foundational finance concepts within technology and entrepreneurial	

settings, the course enables students to assess tradeoffs related to investment, risk, scalability, and sustainability. This perspective is essential for students making or influencing product, engineering, and business decisions in technology-driven organizations.	
***BUSML3XXX The Strategy and Tactics of Software Marketing**	This course has already been developed as BUSML3245H and will be modified to be a non-honors course. This course provides an overview of the economics and marketing strategies essential for success in the software industry. Students will gain an understanding of the unique economic factors influencing software products, including pricing models, market competition, and the impact of network effects. Syllabus for 3245H is in the attachment.
Tie-in: This course directly connects technical product development to market adoption, positioning, and growth. It strengthens the program's emphasis on understanding how software and digital products create value at scale by exposing students to pricing, network effects, and competitive dynamics unique to technology markets. The course reinforces the integrated nature of the degree by ensuring students can translate technical capabilities into compelling market strategies.	
***BUSOBA3XXX: Digital Product Management and Innovation**	This course has already been developed as BUSOBA3243H, but will be modified to be a non-honors course. The course is intended to address foundational operations and product development topics customized to the digital environment. The foundational topics include quality management, capacity planning, inventory management, and constraint/lean management principles. The product development in the digital environment component includes types of digital innovations, collaboration, and supply chain issues in the digital environment, tools for managing the new product development process (e.g., stage gate, agile, and waterfall processes), and prototyping and forecasting best practices. Syllabus for BUSOBA3243H is in the attachment.
Tie-in: This course operationalizes the program's interdisciplinary intent by focusing on how digital products are planned, built, and managed across their lifecycle. Students learn to balance technical constraints, business objectives, and user needs—skills central to roles such as product manager and technical program manager. The course reinforces program outcomes related to product lifecycle management, cross-functional communication, and data-driven decision making.	
DESIGN5505 Information Design	Design principles related to visualizing quantitative information, processes and systems.

Tie-In: Information Design strengthens the program's focus on data-driven communication and decision making by equipping students to translate complex technical and business data into actionable insights. The course reinforces the program's commitment to interdisciplinary fluency, ensuring students can communicate effectively with technical and non-technical stakeholders. This skill set is essential for roles that sit between engineering, business, and leadership.	
CSE2501: Social, Ethical, and Professional Issues in Computing	Social, ethical, and professional issues facing computing professionals; ethical principles; discussion of case studies.
Tie-in: This course grounds the program's technical education in ethical, societal, and professional responsibility. It reinforces the program's emphasis on responsible innovation by ensuring students understand the legal, ethical, and social implications of computing and AI-enabled systems. The course supports program-level outcomes related to critical thinking, accountability, and informed decision making in real-world technology contexts.	
CSE2221 Software I	Intellectual foundations of software engineering; design-by-contract principles; mathematical modeling of software functionality; component-based software from client perspective; layered data representation.
Tie-in: Software I provides the foundational software engineering principles required for students to move from conceptual ideas to functioning systems. Within the program, this course establishes the technical literacy necessary for students to participate meaningfully in product development, collaborate with engineers, and evaluate implementation tradeoffs. It serves as a cornerstone for subsequent systems, AI, and project-based coursework.	
CSE2231: Software II	Data representation using hashing, search trees, and linked data structures; algorithms for sorting; using trees for language processing; component interface design; best practices in Java.
Tie-in: This course deepens students' ability to design and reason about scalable, maintainable software systems. It reinforces the program's goal of producing graduates who not only write code, but understand data structures and algorithms in support of real-world products. The course strengthens analytical thinking and problem-solving capabilities essential to both technical and hybrid technical-business roles.	
CSE2321: Foundations I Discrete Structures	Discrete Structures (existing course)- Propositional and first-order logic; basic proof techniques; graphs, trees; analysis of algorithms; asymptotic analysis; recurrence relations.
Tie-in: Discrete Structures provides the mathematical foundations that underpin algorithmic thinking, system design, and AI concepts used throughout the program. This course reinforces the rigor of the computer science component while supporting students' ability to	

analyze complex systems and reason formally about computation—competencies essential for software engineering and AI-enabled decision making.	
CSE3430 Overview of Computer Systems for Non-Majors	Introduction to computer architecture and organization at machine and assembly level; pointers and addressing using C programming; introduction to operating system concepts: process, memory management, file system and storage, and multi-threaded programming.
Tie-in: This course ensures students understand how software interacts with hardware, operating systems, and networks—knowledge critical for informed product and system decisions. The course reinforces the program's applied orientation by enabling students to evaluate performance, scalability, and resource tradeoffs common in technology environments.	
***CSE252X AI Foundations**	Foundational AI ideas, including machine learning and neural networks.
Tie-In: AI Foundations aligns directly with the program's emphasis on AI fluency and modern computing practices. The course equips students with the conceptual tools to understand, evaluate, and apply AI technologies responsibly in both technical and business contexts. It supports program outcomes related to innovation, ethical reasoning, and informed use of emerging technologies.	
CSE3901 Project: Design, Development, and Documentation of Web Applications (Full Stack)	Intensive group project involving design, development, and documentation of a web application; client-side and server-side scripting; communication skills emphasized; builds programming maturity.
Tie-In: This intensive project course operationalizes the program's experiential learning philosophy by requiring students to design, build, and document a full-stack web application. It reinforces interdisciplinary collaboration, communication, and applied problem-solving while preparing students for the capstone and co-op experiences.	
CSE591X/BUSADM5XXX Capstone	Capstone design project: application of software engineering techniques, methodologies and technologies in software lifecycle activities using enterprise software frameworks; teamwork, written and oral communication.
Tie-in: The capstone serves as the culminating integrative experience for the program, bringing together students from both specializations to solve real-world, industry-relevant problems. Co-taught across business and computer science, the course reinforces all program-level learning outcomes, emphasizing interdisciplinary collaboration, applied innovation, and professional communication.	

Computer Science specialization required courses

The courses for the computer science specialization were selected to provide the knowledge, skills, and competencies needed for someone interested in software engineering for AI systems.

CSE2XXX/BUSADM2XXX: Co-op or project course	Provides students with a supervised, structured opportunity to apply computer science and business concepts in a professional setting related to technology development, product engineering, or AI-enabled systems. Students will integrate classroom learning with workplace practice, develop professional communication and project management skills, and demonstrate reflective learning through documentation connecting academic concepts to real-world application.
Tie-In: The co-op experience reinforces the program's commitment to applied learning by integrating professional work directly into the curriculum. Students apply technical and business concepts in real organizational contexts, strengthening the link between classroom learning and industry practice.	
Math25XX: Linear Algebra	Introduces students to linear algebra concepts foundational to modern computing, including vectors, matrices, linear transformations, and systems of equations. Students will develop the mathematical reasoning necessary to understand and apply concepts in artificial intelligence, machine learning, data analysis, and computer graphics, strengthening their ability to engage with technically rigorous computing topics.
Tie-in: Linear Algebra provides essential mathematical foundations for AI, machine learning, and advanced computing topics emphasized in the Computer Science specialization. This course supports the program's emphasis on technical rigor while enabling students to engage meaningfully with AI-enabled systems.	
CSE3231: Software Engineering Techniques	Focuses on advanced software engineering practices used in the design and development of large, maintainable software systems. Students will learn modern development methodologies, design patterns, testing strategies, and team-based engineering practices. Emphasis is placed on requirements traceability, system quality, and collaboration within multidisciplinary teams.

Tie-in: This course advances students' ability to design, implement, and manage complex software systems using modern development methodologies. It directly supports program outcomes related to product development lifecycle management and prepares students for technical and technology leadership roles.	
CSE3241: Introduction to Database Systems	Introduces principles of database system design and implementation, including data modeling, relational databases, query languages, normalization, transaction processing, and data integrity. Students will gain hands-on experience designing and interacting with data-driven systems that underpin modern software applications and digital products.
Tie-in: Database Systems equips students to design and manage data-driven applications central to modern digital products. The course reinforces the program's focus on scalable systems and data-informed decision-making.	
CSE3232: Requirements Analysis	Develops students' ability to elicit, analyze, document, and manage system and product requirements. Students will learn techniques for translating user, business, and technical needs into clear, testable specifications, with an emphasis on communication across technical and non-technical stakeholders. The course prepares students to reduce ambiguity and risk in software and system development.
Tie-in- This course strengthens students' ability to translate business, user, and system needs into actionable technical requirements. It reinforces the program's core objective of bridging technical and non-technical perspectives in product development.	

Go to Market specialization required courses

The courses for the Go to Market specialization were selected specifically to advance knowledge, skills, and competencies in how businesses understand how technology products, with some emphasis on software and digital, are monetized and positioned.

CSE2XXX/BUSADM2XXX: Co-op or project course	Provides students with applied experience in market-facing, revenue-driven, or operations-oriented technology roles. Students will apply business, analytical, and technical concepts in professional contexts such as product marketing, technical sales, revenue operations, or

	customer discovery, while developing professional skills, reflective practice, and career readiness.
Tie-In: For GTM students, the co-op emphasizes applied learning in market-facing, revenue-generating, or operations-oriented roles. It reinforces the program's emphasis on experiential learning and professional readiness.	
BUSADM4202: Marketing Research	Equips students with tools and methods for designing, executing, and analyzing marketing research studies. Students will learn qualitative and quantitative research techniques, including survey design, data collection, and insight synthesis, with an emphasis on supporting strategic decision-making for technology and innovation-driven products.
Tie-in: This course develops students' ability to generate and interpret customer and market insights, reinforcing the program's emphasis on data-driven decision making and evidence-based strategy for technology products.	
***BUSMHR320X**	Introduces foundational concepts in organizational behavior, teamwork, leadership, and human resource management. Students will examine how individual behavior, group dynamics, and organizational systems influence performance, with particular attention to collaboration and leadership within technology-enabled and innovation-driven organizations.
Tie-in: This course reinforces the program's focus on cross-functional teamwork and organizational effectiveness within technology environments, preparing students to lead and collaborate in complex, interdisciplinary settings.	
***BUSML42XX Software Sales and Go to Market**	Explores the strategies and execution models used to commercialize software and digital products. Students will learn how technology products are positioned, sold, and scaled, including customer segmentation, value-based selling, sales processes, revenue models, and alignment between product, sales, and marketing teams. Emphasis is placed on practical application in technology markets.
Tie-in: This course directly supports the program's commercialization and growth objectives by preparing students to design and execute go-to-market strategies for technology products. It reinforces the applied, industry-relevant orientation of the GTM specialization.	

Attachment 1: Syllabi for major core and specialization required courses

Table of Contents:

- **BUSADMXXXX Foundations of Tech Innovation I**- course going through approvals
- **BUSADMXXXX Foundations of Tech Innovation II**- course going through approvals
- **FIN3120**- This isn't the exact course description, but foundationally the new course will hit on these same learning outcomes + include foundations in entrepreneurial finance
- **BUSML3245H**- This is the course description for the honors level which will be adapted to non-honors for this degree
- **BUSOBA3243H**- This is the course description for the honors level which will be adapted to non-honors for this degree
- **Design5505**
- **CSE2501**
- **CSE2221**
- **CSE2231**
- **CSE2331**
- **CSE3430**
- **[not included] CSE252X-** This is a new course that will be created
- **CSE3901**
- **CSE5911**- This is an existing CSE capstone course for software applications. We will use this as a foundation to create a new capstone incorporating principles across the blended core
- **[not included] CSE2XXX and BUSADM2XXX (co-op/project course)** - this course description has not been developed yet
- **MATH25XX**- We have included the syllabus for Linear Algebra, but through the Undergraduate Education office we are working on supporting a version that will not require Calc 2
- **CSE3231**
- **CSE3241**
- **CSE3232**
- **BUSADM4202**
- **BUSMHR-** This isn't the exact course description, but foundationally the new course will hit on these same learning outcomes + include context for technology-centric organizations
- **[not included] BUSMLXX Software Sales Go to Market-** this course description has not been developed yet

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We plan for 1 credit hour to be equivalent to 10 hours of work per week. When the degree proposal is sent to ODHE, we will verify that these numbers and calculations are allowable under ODHE as well, and that they match past documentation and guidance.

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Yes! Putting that at the end of this document.

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This program is intended to contribute to Ohio State's further competitiveness in being able to attract strong students who are interested in working in technology companies in strategic roles such as product management. Therefore, the proposed B.S. in Computer Science and Business is expected to have a net positive and complementary impact on existing programs across the Fisher College of Business, the College of Engineering, and related units, rather than a disruptive or resource-dilutive effect. We expect that this program will aid in Ohio State getting more of the students who might otherwise choose a program such as Berkeley's MET program to choose Ohio State.

Impact on Computer Science and Engineering Programs- We do not anticipate a negative impact on the traditional B.S. in Computer Science or related CSE degree pathways. The proposed degree is intentionally designed for a distinct student profile- students interested in

applied software development and AI in the context of product development, commercialization, and business operations, rather than students seeking deep theoretical or research-oriented computer science preparation.

While some students who might otherwise pursue Computer Science or Computer Information Systems may elect this new major, this shift is expected to be strategic. The program preserves core CSE rigor and draws heavily on existing CSE courses, meaning instructional demand remains aligned with current offerings and staffing models. Importantly, students seeking depth in areas such as advanced algorithms, theory, machine learning research, or doctoral preparation are expected to continue to select the traditional Computer Science major, which remains the most appropriate pathway for those goals.

Over time, this clearer differentiation between programs is expected to reduce misalignment between student interests and degree selection, allowing CSE to more precisely serve both deeply technical students and applied, interdisciplinary “builder” profiles through distinct but complementary pathways via the department’s emerging CS + X model.

Impact on Business Programs- Within the Fisher College of Business, the new degree is expected to expand the college’s portfolio without displacing existing specializations. The B.S. in Computer Science and Business serves a student population seeking substantially deeper technical computing preparation than is typical within traditional business majors, while still grounding that preparation in business fundamentals.

Students currently pursuing business majors supplemented by a computer science minor—or vice versa—are a strong indicator of unmet demand for an integrated, single-degree pathway. By consolidating this pattern into a purpose-built degree, the program improves efficiency for students while reducing the need for excess credit accumulation through double majors or minors.

Impact on Interdisciplinary and Honors Programs- The program is designed to be complementary to existing interdisciplinary offerings, including the Integrated Business and Engineering- Software Innovation (IBE-SI) honors program. IBE-SI remains a highly selective, cohort-based honors experience that allows students to remain fully anchored in either an engineering or business major and accepts 36 incoming students per year due to the honors distinction. In contrast, the proposed degree is non-honors, scalable, and intentionally structured as a single integrated major.

We expect the B.S. in Computer Science and Business to broaden access to interdisciplinary education rather than compete directly with IBE-SI. Enrollment patterns and student demand will be monitored, and if needed, program leaders will coordinate with IBE leadership to ensure ongoing alignment across pathways.

Resource and Enrollment Considerations- Because the program leverages planned faculty hiring and CSI-funded faculty positions, we do not anticipate adverse impacts to course

availability or instructional quality in existing programs. Governance through a joint oversight committee ensures cross-college coordination, proactive enrollment management, and responsiveness to any emerging capacity concerns.

4. **What is the expected effort to ensure that all students can obtain a co-op long term?**

   Is the additional staffing adequate? Are any additional resources needed long term?

We have a few channels and staffing that will be supporting both securing job opportunities for the students as well as ensuring student success in the co-op roles:

- **Dedicated resources:** Currently in the Center for Software Innovation, we have a director of engagement and development who is already starting to source co-op/internships for students and will continue to do this as part of the role responsibilities. We will additionally be hiring:
  - **Corporate partnerships analyst/manager-** This person will be fully dedicated to identifying and securing new co-op opportunities and working closely with the students. If needed, we will use the stated philanthropic funds to support the additional role.
  - **Co-op manager-** We will be hiring a co-op manager who will be focused on ensuring student success and strong experience in the co-op as well as coordination with the faculty to ensure strong learning outcomes.
- **Partnered resources:** Internally, we have strong partnerships with the Corporate and Foundation Engagement team who we have already started working with on bringing these opportunities to corporates.
- **External help:** The CSI advisory council, their network, and other external supporters we will also engage to support finding opportunities.

Because we understand that securing these types of opportunities is an essential component of the program, this upcoming academic year we are building up our capacity and processes for securing paid, part-time work opportunities for students (they are not planned for credit until this new degree program launches). We already have verbal commitments from Honda, Wexner Medical Center, RWX, OH.io, and in process with others on roles for students. In many cases, it is for multiple roles per company.

For general staffing needs, we will continue to evaluate and monitor the staffing needs to deliver on the program experience. As an example, we may require more academic advising support than what is listed. In these cases, we plan to use the philanthropic funds outlined to support these costs.

5. Can you speak more to accreditation?

   What steps were taken to fully align the program with AACSB?

   For clarity can talk through the choice to opt for AACSB vs. ABET accreditation for the degree?

   Was this just based upon the college home choice?

To clarify, this new degree will not seek any specialized accreditation. Overall, it will be under the Higher Learning Commission (HLC).

The Fisher College of Business has AACSB accreditation at the college level and, given that the number of required business courses in the degree is variable depending on the specialization track selected, we will be requesting to AACSB that this program is out of scope.

Regarding ABET, given the intended knowledge, skills, and career outcomes for this degree, in roles such as product management, business analyst, product marketing, software engineer, technical sales, devops, ABET was deemed as not necessary for these post-graduate pathways. The targeted post-graduation roles typically do not require ABET accreditation. However, we will continue to monitor employers and the market and be responsive to changes in need here.

Exhibit 1: Course descriptions, objectives, and intended outcomes, and tie it to the overall program

The overall program is designed to provide the breadth of foundational knowledge to all students for operating effectively within technology organizations, as well as depth through specializations that make them experts in computer science, specifically in software engineering with AI, and go-to-market. This follows a T-shaped skill set of breadth and depth.

Courses in the major core are below. Overall, this “blended core” was designed by looking at the core foundational computer science and business courses required for most students in those programs. The core design preserves the pedagogy of the design of the CS and business programs but purposefully adds in the real-life example context of situations in technology companies.

Course syllabi for required courses are in the attachment.

Course	Objectives and Learning Outcomes

***BUSADMXXXX- Foundations of Tech Innovation I**	Introduces opportunity discovery, customer validation, and business model design through a compressed, project-based format. Teams develop validated problem statements,test solution viability, and produce minimum viable product (MVP) specifications ready for development. This is a new course that is going through course approvals- syllabus in the attachment
Tie-in: This course anchors the program's emphasis on problem discovery and value creation at the intersection of technology and business. It establishes a common language across students with different technical backgrounds and prepares them to translate customer, market, and operational insights into technically feasible product concepts. By emphasizing experimentation, ambiguity, and early validation, the course lays the foundation for subsequent software development, systems, and go-to-market coursework, reinforcing the program's goal of producing graduates who can connect technical decisions to business outcomes.	
***BUSADMXXXX- Foundations of Tech Innovation II**	Develops product development and go-to-market execution skills through hands-on MVP construction and growth strategy implementation. Teams launch live products, generate measurable traction, and present investor-ready pitches with commercialization strategies. This is a new course that is going through course approvals- syllabus in the attachment
Tie-In: Building directly on Foundations I, this course advances the program's applied learning model by moving students from validated concepts to execution and launch. The course reinforces systems thinking, cross-functional collaboration, and iterative development—competencies essential for operating within technology organizations. It intentionally bridges technical implementation with commercialization strategy, reinforcing the program's core objective of preparing students to build, assess, and scale technology-enabled products. Students will leave Foundations of Tech Innovation I and II prepared for their co-op and project work	
***BUSFIN3XXX Finance in Emerging Technology**	This course has not yet been created, but will largely be based on FIN3120: Foundations of Finance, covering time value of money, financial statements, risk and return, investment valuation, net present value and key management topics while putting these concepts in the context of technology and entrepreneurial situations. The syllabus for FIN3120 is in the attachment, but it will be adjusted as the new course is created.
Tie-in: This course supports the program's goal of developing technology-fluent decision makers by equipping students to evaluate technical and product choices through a financial lens. By contextualizing foundational finance concepts within technology and entrepreneurial	

settings, the course enables students to assess tradeoffs related to investment, risk, scalability, and sustainability. This perspective is essential for students making or influencing product, engineering, and business decisions in technology-driven organizations.	
***BUSML3XXX The Strategy and Tactics of Software Marketing**	This course has already been developed as BUSML3245H and will be modified to be a non-honors course. This course provides an overview of the economics and marketing strategies essential for success in the software industry. Students will gain an understanding of the unique economic factors influencing software products, including pricing models, market competition, and the impact of network effects. Syllabus for 3245H is in the attachment.
Tie-in: This course directly connects technical product development to market adoption, positioning, and growth. It strengthens the program's emphasis on understanding how software and digital products create value at scale by exposing students to pricing, network effects, and competitive dynamics unique to technology markets. The course reinforces the integrated nature of the degree by ensuring students can translate technical capabilities into compelling market strategies.	
***BUSOBA3XXX: Digital Product Management and Innovation**	This course has already been developed as BUSOBA3243H, but will be modified to be a non-honors course. The course is intended to address foundational operations and product development topics customized to the digital environment. The foundational topics include quality management, capacity planning, inventory management, and constraint/lean management principles. The product development in the digital environment component includes types of digital innovations, collaboration, and supply chain issues in the digital environment, tools for managing the new product development process (e.g., stage gate, agile, and waterfall processes), and prototyping and forecasting best practices. Syllabus for BUSOBA3243H is in the attachment.
Tie-in: This course operationalizes the program's interdisciplinary intent by focusing on how digital products are planned, built, and managed across their lifecycle. Students learn to balance technical constraints, business objectives, and user needs—skills central to roles such as product manager and technical program manager. The course reinforces program outcomes related to product lifecycle management, cross-functional communication, and data-driven decision making.	
DESIGN5505 Information Design	Design principles related to visualizing quantitative information, processes and systems.

Tie-In: Information Design strengthens the program's focus on data-driven communication and decision making by equipping students to translate complex technical and business data into actionable insights. The course reinforces the program's commitment to interdisciplinary fluency, ensuring students can communicate effectively with technical and non-technical stakeholders. This skill set is essential for roles that sit between engineering, business, and leadership.	
CSE2501: Social, Ethical, and Professional Issues in Computing	Social, ethical, and professional issues facing computing professionals; ethical principles; discussion of case studies.
Tie-in: This course grounds the program's technical education in ethical, societal, and professional responsibility. It reinforces the program's emphasis on responsible innovation by ensuring students understand the legal, ethical, and social implications of computing and AI-enabled systems. The course supports program-level outcomes related to critical thinking, accountability, and informed decision making in real-world technology contexts.	
CSE2221 Software I	Intellectual foundations of software engineering; design-by-contract principles; mathematical modeling of software functionality; component-based software from client perspective; layered data representation.
Tie-in: Software I provides the foundational software engineering principles required for students to move from conceptual ideas to functioning systems. Within the program, this course establishes the technical literacy necessary for students to participate meaningfully in product development, collaborate with engineers, and evaluate implementation tradeoffs. It serves as a cornerstone for subsequent systems, AI, and project-based coursework.	
CSE2231: Software II	Data representation using hashing, search trees, and linked data structures; algorithms for sorting; using trees for language processing; component interface design; best practices in Java.
Tie-in: This course deepens students' ability to design and reason about scalable, maintainable software systems. It reinforces the program's goal of producing graduates who not only write code, but understand data structures and algorithms in support of real-world products. The course strengthens analytical thinking and problem-solving capabilities essential to both technical and hybrid technical-business roles.	
CSE2321: Foundations I Discrete Structures	Discrete Structures (existing course)- Propositional and first-order logic; basic proof techniques; graphs, trees; analysis of algorithms; asymptotic analysis; recurrence relations.
Tie-in: Discrete Structures provides the mathematical foundations that underpin algorithmic thinking, system design, and AI concepts used throughout the program. This course reinforces the rigor of the computer science component while supporting students' ability to	

analyze complex systems and reason formally about computation—competencies essential for software engineering and AI-enabled decision making.	
CSE3430 Overview of Computer Systems for Non-Majors	Introduction to computer architecture and organization at machine and assembly level; pointers and addressing using C programming; introduction to operating system concepts: process, memory management, file system and storage, and multi-threaded programming.
Tie-in: This course ensures students understand how software interacts with hardware, operating systems, and networks—knowledge critical for informed product and system decisions. The course reinforces the program's applied orientation by enabling students to evaluate performance, scalability, and resource tradeoffs common in technology environments.	
***CSE252X AI Foundations**	Foundational AI ideas, including machine learning and neural networks.
Tie-In: AI Foundations aligns directly with the program's emphasis on AI fluency and modern computing practices. The course equips students with the conceptual tools to understand, evaluate, and apply AI technologies responsibly in both technical and business contexts. It supports program outcomes related to innovation, ethical reasoning, and informed use of emerging technologies.	
CSE3901 Project: Design, Development, and Documentation of Web Applications (Full Stack)	Intensive group project involving design, development, and documentation of a web application; client-side and server-side scripting; communication skills emphasized; builds programming maturity.
Tie-In: This intensive project course operationalizes the program's experiential learning philosophy by requiring students to design, build, and document a full-stack web application. It reinforces interdisciplinary collaboration, communication, and applied problem-solving while preparing students for the capstone and co-op experiences.	
CSE591X/BUSADM5XXX Capstone	Capstone design project: application of software engineering techniques, methodologies and technologies in software lifecycle activities using enterprise software frameworks; teamwork, written and oral communication.
Tie-in: The capstone serves as the culminating integrative experience for the program, bringing together students from both specializations to solve real-world, industry-relevant problems. Co-taught across business and computer science, the course reinforces all program-level learning outcomes, emphasizing interdisciplinary collaboration, applied innovation, and professional communication.	

Computer Science specialization required courses

The courses for the computer science specialization were selected to provide the knowledge, skills, and competencies needed for someone interested in software engineering for AI systems.

CSE2XXX/BUSADM2XXX: Co-op or project course	Provides students with a supervised, structured opportunity to apply computer science and business concepts in a professional setting related to technology development, product engineering, or AI-enabled systems. Students will integrate classroom learning with workplace practice, develop professional communication and project management skills, and demonstrate reflective learning through documentation connecting academic concepts to real-world application.
Tie-In: The co-op experience reinforces the program's commitment to applied learning by integrating professional work directly into the curriculum. Students apply technical and business concepts in real organizational contexts, strengthening the link between classroom learning and industry practice.	
Math25XX: Linear Algebra	Introduces students to linear algebra concepts foundational to modern computing, including vectors, matrices, linear transformations, and systems of equations. Students will develop the mathematical reasoning necessary to understand and apply concepts in artificial intelligence, machine learning, data analysis, and computer graphics, strengthening their ability to engage with technically rigorous computing topics.
Tie-in: Linear Algebra provides essential mathematical foundations for AI, machine learning, and advanced computing topics emphasized in the Computer Science specialization. This course supports the program's emphasis on technical rigor while enabling students to engage meaningfully with AI-enabled systems.	
CSE3231: Software Engineering Techniques	Focuses on advanced software engineering practices used in the design and development of large, maintainable software systems. Students will learn modern development methodologies, design patterns, testing strategies, and team-based engineering practices. Emphasis is placed on requirements traceability, system quality, and collaboration within multidisciplinary teams.

Tie-in: This course advances students' ability to design, implement, and manage complex software systems using modern development methodologies. It directly supports program outcomes related to product development lifecycle management and prepares students for technical and technology leadership roles.	
CSE3241: Introduction to Database Systems	Introduces principles of database system design and implementation, including data modeling, relational databases, query languages, normalization, transaction processing, and data integrity. Students will gain hands-on experience designing and interacting with data-driven systems that underpin modern software applications and digital products.
Tie-in: Database Systems equips students to design and manage data-driven applications central to modern digital products. The course reinforces the program's focus on scalable systems and data-informed decision-making.	
CSE3232: Requirements Analysis	Develops students' ability to elicit, analyze, document, and manage system and product requirements. Students will learn techniques for translating user, business, and technical needs into clear, testable specifications, with an emphasis on communication across technical and non-technical stakeholders. The course prepares students to reduce ambiguity and risk in software and system development.
Tie-in- This course strengthens students' ability to translate business, user, and system needs into actionable technical requirements. It reinforces the program's core objective of bridging technical and non-technical perspectives in product development.	

Go to Market specialization required courses

The courses for the Go to Market specialization were selected specifically to advance knowledge, skills, and competencies in how businesses understand how technology products, with some emphasis on software and digital, are monetized and positioned.

CSE2XXX/BUSADM2XXX: Co-op or project course	Provides students with applied experience in market-facing, revenue-driven, or operations-oriented technology roles. Students will apply business, analytical, and technical concepts in professional contexts such as product marketing, technical sales, revenue operations, or

	customer discovery, while developing professional skills, reflective practice, and career readiness.
Tie-In: For GTM students, the co-op emphasizes applied learning in market-facing, revenue-generating, or operations-oriented roles. It reinforces the program's emphasis on experiential learning and professional readiness.	
BUSADM4202: Marketing Research	Equips students with tools and methods for designing, executing, and analyzing marketing research studies. Students will learn qualitative and quantitative research techniques, including survey design, data collection, and insight synthesis, with an emphasis on supporting strategic decision-making for technology and innovation-driven products.
Tie-in: This course develops students' ability to generate and interpret customer and market insights, reinforcing the program's emphasis on data-driven decision making and evidence-based strategy for technology products.	
***BUSMHR320X**	Introduces foundational concepts in organizational behavior, teamwork, leadership, and human resource management. Students will examine how individual behavior, group dynamics, and organizational systems influence performance, with particular attention to collaboration and leadership within technology-enabled and innovation-driven organizations.
Tie-in: This course reinforces the program's focus on cross-functional teamwork and organizational effectiveness within technology environments, preparing students to lead and collaborate in complex, interdisciplinary settings.	
***BUSML42XX Software Sales and Go to Market**	Explores the strategies and execution models used to commercialize software and digital products. Students will learn how technology products are positioned, sold, and scaled, including customer segmentation, value-based selling, sales processes, revenue models, and alignment between product, sales, and marketing teams. Emphasis is placed on practical application in technology markets.
Tie-in: This course directly supports the program's commercialization and growth objectives by preparing students to design and execute go-to-market strategies for technology products. It reinforces the applied, industry-relevant orientation of the GTM specialization.	

Attachment 1: Syllabi for major core and specialization required courses

Table of Contents:

- **BUSADMXXXX Foundations of Tech Innovation I**- course going through approvals
- **BUSADMXXXX Foundations of Tech Innovation II**- course going through approvals
- **FIN3120**- This isn't the exact course description, but foundationally the new course will hit on these same learning outcomes + include foundations in entrepreneurial finance
- **BUSML3245H**- This is the course description for the honors level which will be adapted to non-honors for this degree
- **BUSOBA3243H**- This is the course description for the honors level which will be adapted to non-honors for this degree
- **Design5505**
- **CSE2501**
- **CSE2221**
- **CSE2231**
- **CSE2331**
- **CSE3430**
- **[not included] CSE252X-** This is a new course that will be created
- **CSE3901**
- **CSE5911**- This is an existing CSE capstone course for software applications. We will use this as a foundation to create a new capstone incorporating principles across the blended core
- **[not included] CSE2XXX and BUSADM2XXX (co-op/project course)** - this course description has not been developed yet
- **MATH25XX**- We have included the syllabus for Linear Algebra, but through the Undergraduate Education office we are working on supporting a version that will not require Calc 2
- **CSE3231**
- **CSE3241**
- **CSE3232**
- **BUSADM4202**
- **BUSMHR-** This isn't the exact course description, but foundationally the new course will hit on these same learning outcomes + include context for technology-centric organizations
- **[not included] BUSMLXX Software Sales Go to Market-** this course description has not been developed yet

From:	Agrawal, Shereen
To:	Reed, Katie; Smith, Randy
Cc:	Croxton, Keely; Matyas, Cory; Tomasko, David; Machiraju, Raghu; Dotson, Jeff; Morris, Jeremy
Subject:	[For CAA Review] Proposal for B.S in Computer Science and Business
Date:	Wednesday, March 25, 2026 11:54:33 AM
Attachments:	CAA Proposal for Bachelor of Science in Computer Science and Business.pdf

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Hi Randy and Katie,

We are excited to share with you the proposal to establish a Bachelor of Science in Computer Science and Business, presented by the Fisher College of Business, College of Engineering, and the Center for Software Innovation, conferred by the Fisher College of Business. Please see attached for our proposal.

The proposal was reviewed by the College of Engineering CCAA (College Committee on Academic Affairs) at the March 25, 2026 meeting and a letter of support (in the attachment) followed that meeting. The proposal was reviewed and approved at the Fisher College of Business undergraduate programs committee on March 23, 2026.

We look forward to attending the April 8 CAA meeting. Thank you very much and please let us know if there are any questions or anything else we can provide or answer.

Thanks,

Shereen

THE OHIO STATE UNIVERSITY

March 25, 2026

Dear Colleagues and Committee Members,

We are pleased to submit for your review a proposal for a new undergraduate degree leading to the Bachelor of Science in Computer Science & Business. This interdisciplinary program is a deep partnership between the Fisher College of Business, the College of Engineering (CoE), and the Center for Software Innovation (CSI), and collaboration with the Department of Design. The degree will be conferred by the Fisher College of Business.

The proposed degree responds to evolving workforce expectations affecting all industries and sectors as technology, and in particular AI, is a growing influence in both the products and services offered by companies as well as how the companies are operating. Increasingly, and tied to much of the projected areas of job growth, expertise in computing as well as understanding of the business and revenue generation activities are becoming essential areas of competency in technology centric organizations and roles. Further, tangible demonstration of acquired skills and work experience are increasing factors in hiring.

The proposed degree curriculum preserves rigorous computer science foundations while deeply integrating applied business principles and AI fluency throughout the program. In doing so, it prepares students to operate effectively within cross-functional environments common in startups, scaleups, and established technology enterprises.

Students will engage in a blended core curriculum across computer science, business and design, followed by an option of a computer science (the "Build" track) or business-focused (the "Launch" track) specialization that students can choose from to develop further expertise. These specializations align and prepare students for opportunities in growing job roles such as AI/ML (artificial intelligence/machine learning) operations, software engineering with AI, digital product development, and go-to-market functions including technical sales, revenue operations, and product marketing, A defining feature of the program is its structured, credit-bearing, integrated work experience model, which combines the option of concurrent, part-time professional engagement with classroom instruction to reinforce applied learning.

Through this degree, Ohio State advances a collaborative and forward-looking model of interdisciplinary education that aligns academic rigor with industry needs. The program strengthens institutional partnerships with technology employers, expands opportunities for experiential learning, and enhances Ohio State's position as a destination for students seeking an integrated computing and business education.

Thank you for your thoughtful consideration of this proposal.

Sincerely,

Jeff Dotson

Dr. Jeff Dotson
Associate Professor of Marketing Max M. Fisher College of Business; Center for Software Innovation Faculty Director

Raghu Machiraju

Dr. Raghu Machiraju
Professor of Computer Science, Bioinformatics, and Pathology; Associate Chair for Growth, Computer Science and Engineering; Assistant Director for Operations, AI$^{(X)}$ Hub @ Ohio State

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Proposal for a Bachelor of Science in Computer Science and Business

1. General Information

a. **Name of proposed degree:** Bachelor of Science in Computer Science and Business (B.S. in Computer Science and Business)
b. **Type of Program/Plan:** Undergraduate bachelor's degree program
c. **Proposed implementation date:** First students to begin program Autumn 2027
d. **Academic unit(s) responsible for administering the program:** Department of Computer Science and Engineering in the College of Engineering, Department of Marketing and Logistics in the Fisher College of Business. The degree will be conferred by the Fisher College of Business

2. Executive Summary:

The Fisher College of Business and the College of Engineering propose a new undergraduate degree, a Bachelor of Science in Computer Science and Business, preparing and educating students with the knowledge, skills and competencies to be future leaders in technology and technology related roles. Building off the strong existing foundations in computer science and business, this program features a deeply integrated blended core with experiential learning, two specialization track options in computer science and go-to-market, and a for-credit, paid, part-time co-op that allows students to apply their learning in context.

3. Rationale

The accelerating pace of technological innovation, driven by artificial intelligence, cloud infrastructure, data engineering, cybersecurity, and product-led growth models, is reshaping the U.S. and global workforce. This transformation is blurring the traditional boundaries between “technical” and “business” roles. Today’s organizations increasingly require talent capable of operating at the intersection of computing, product development, and business strategy. As a result, existing and emerging roles are blending computing competency with business decision-making skills. For example, roles such as software engineering increasingly require understanding the business context of the product being launched, and roles such as product management increasingly require an understanding of how the company’s product is built. These trends and market data point to a clear need for more knowledge, skill, and competency development at the intersection of computer science and business.

Growth of Hybrid, Technology-Centric Roles

Across industries, demand for technology-fluent professionals is climbing sharply. Computer and mathematical occupations, driven by artificial intelligence (AI), automation, cybersecurity, and data-intensive systems, are projected to experience some of the fastest growth in the labor

market. According to the U.S. Bureau of Labor Statistics, software developers, QA analysts, and testers alone are projected to grow 15% from 2024-2034[1].

However, organizations adopting AI and modern technologies increasingly cite the need for professionals who understand not only how systems are built, but why they are built, linking engineering decisions to customer value, market strategy, pricing, adoption, and revenue. This shift is reflected in the rapid growth of product management and other "hybrid" technology roles, referring to roles requiring skills from more than one field. Product management positions, as an example, show 29% year over year growth[2].

The necessity for the interdisciplinary skillset across computer science and business competencies is further confirmed by these and the below shifts in labor market dynamics and employer priorities. As organizations transition toward product-led growth and AI-integrated operations, demand for hybrid roles that span competencies is increasing.

- **Market Growth & Demand:** According to the Bureau of Labor Statistics (2025), "[d]emand for artificial intelligence (AI)-based systems, data processing, software development, research services, and associated consulting services" are expected to drive workforce needs in the professional, scientific, and technical services sector by 7.5% and 6.5% in the information sector.[3]
- **The Hybrid Role Premium:** Research from Burning Glass Technologies[4] indicates that hybrid jobs now represent one in eight job postings. These roles are projected to grow twice as fast as the overall job market. Furthermore, the predicted future high-paying roles are expected to be "more complex, multi-disciplinary" and "hybrid." Referenced roles include product manager and marketing manager, which are part of the target roles for this proposed degree and are expected to command a salary premium of 20–40% over traditional, single-domain counterparts.
- **Strategic Decision-Making:** Employer demand for decision-making skills, including communication, data analysis, and negotiation skills, is most prevalent in computer and mathematical occupations, appearing in 68% of job postings[5], followed next by appearance in postings for business and financial operations.

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[1] U.S. Bureau of Labor Statistics. 2024. Occupational Outlook Handbook. https://www.bls.gov/ooh/Computer-and-Information-Technology/Software-developers.htm

[2] Product Management Institute. 2024. Growth Trends in Product Management. https://productmanagementinstitute.org/post/growth-trends-in-product-management

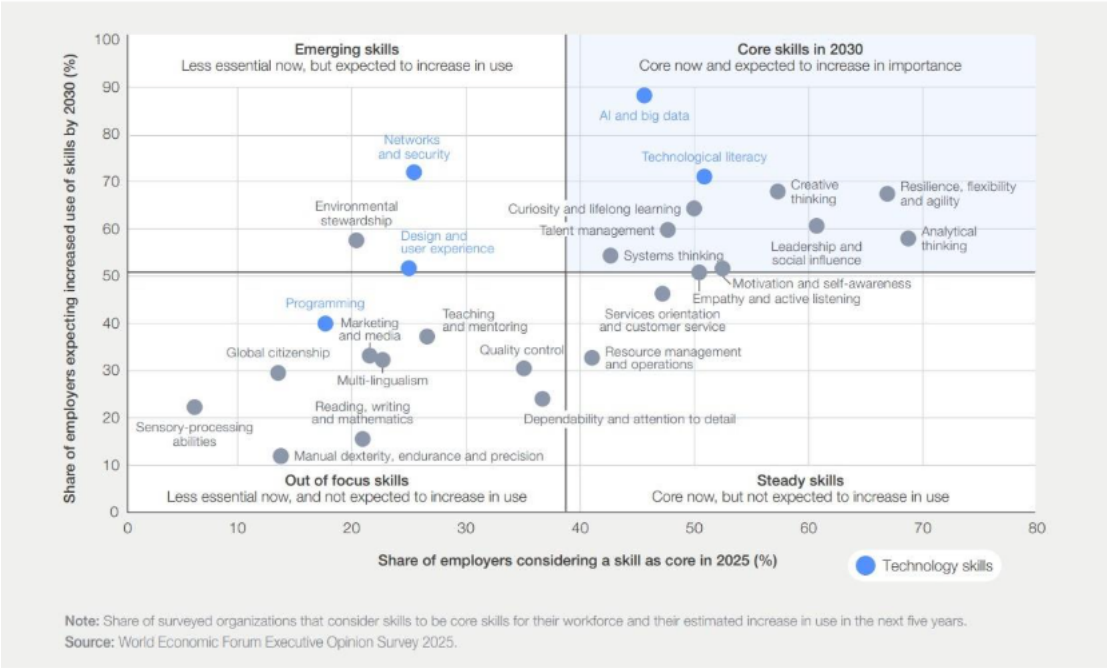
[3] U.S. Bureau of Labor Statistics. 2025. Employment Projections 2024-2034. https://www.bls.gov/news.release/pdf/ecopro.pdf#:~:text=Demand%20for%20artificial%20intelligence%20(AI)%2Dbased%20systems%2C%20data,percent)%20and%20the%20information%20sector%20(+6.5%20percent).

[4] [2] Burning Glass Technologies (now Lightcast). https://ca-hwi.org/public/uploads/pdfs/hybrid_jobs_2019_final.pdf#:~:text=Our%20new%20analysis%20of%20hybrid%20jobs%2C%20based,(21%25%20vs%2010%25%20over%20the%20next%20decade.

[5] The Burning Glass Institute, Decision Skills in the Workforce 2025, https://www.burningglassinstitute.org/research.

FIGURE 3 | **Skill evolution, 2025–2030**

WORLD ECONOMIC FORUM



Note: Share of surveyed organizations that consider skills to be core skills for their workforce and their estimated increase in use in the next five years.
Source: World Economic Forum Executive Opinion Survey 2025.

A New Standard for Skills

This evolution is explicitly reflected in the shifting skill priorities of global employers. As illustrated in the World Economic Forum (2025)[6] data above, there is a significant migration toward "Core Skills in 2030," where Technological Literacy, considered a core competency by 51% of organizations and projected to grow to 68% by 2030, sits alongside human-centric skills like Systems Thinking and Analytical Thinking. This same report states that "[b]usiness leaders ramp[ed] up demand for digital skills in the wake of sweeping transformation efforts." The skills on the chart marked in blue, such as AI and big data, technology literacy, design and user experience, networks and cybersecurity, and programming are viewed as essential now and growing in importance over the next five years.

The National Association of Colleges + Employers 2026 Job Outlook Report[7] further highlights the need for candidates to demonstrate tangible skills and experience in the hiring process. 69.5% of employers responded yes to using skills-based hiring. 74.1% of employers recommend student participation in experiential learning and/or work during college for success in the skills-based hiring process and further cite U.S. based internships (97%) and co-ops (76%) as the two most valuable experiential learning opportunities on a student's resume.

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[6] [4] World Economic Forum, *New Economy Skills: Building AI, Data and Digital Capabilities for Growth*, Figure 3: Skill Evolution 2025–2030 (December 2025), **https://reports.weforum.org/docs/WEF_New_Economy_Skills_2025.pdf**.

[7] National Association of Colleges and Employers Job Outlook 2026 Report: https://www.naceweb.org/research/reports/job-outlook/2026/#download

Student Behaviors Signaling Need

- **Students interested in working in technology-centric roles and organizations are actively seeking hands-on opportunities to build more products.** The most recent HackOHI/O had nearly 1,200 registrants, there is an increasing number of build-a-thons and hackathons across the Ohio State campus and other campuses, and our students are traveling to participate in hackathon and other innovation-type programs. Skills built in these types of programs tie directly to employer needs. In a conversation with an employer who participates in the Northeastern co-op program, the hiring manager mentioned that in addition to teamwork, ability to learn, and critical thinking, what they also look for in undergraduate candidates are demonstratable skills. The example provided was being able to select and set up an S3 storage bucket on Amazon Web Services.

- **Students majoring in business or computer science are increasingly seeking education in the other field.** Based on Autumn 2025 enrollment data, 122 Computer Science and Engineering students are enrolled in a business minor, which is an over 2x increase from Autumn 2024 at 57. The number of business majors enrolled in a computer science minor grew from 12 in Autumn 2023 to 93 in Autumn 2024, with most recent data at 72. Even though these pathways require 15+ credit hours beyond the student's primary degree, the numbers point to the demand in an education across these disciplines.

- **Students feel pressure to gain work experience even during the school year and in some cases to graduate early to lock in job opportunities.** In conversations with a group of CSE students, several mentioned working 10-15 hours a week with either their prior summer intern employer or in another job related to their field of interest. Some also mentioned that they were trying to graduate early due to feelings of anxiety of securing a job and wanting to move from paying tuition to earning income.

The B.S in Computer Science and Business

The Bachelor of Science in Computer Science & Business responds directly to these workforce and student trends. By purposefully integrating interdisciplinary education with work experience, the program prepares a new generation of leaders who do not just support a business with technology, but also use technical depth to define and drive business outcomes.

The primary target audience for this degree will be undergraduate students who are interested in working in technology companies in roles related to building and/or launching technology products, primarily digital products, or company operations. These students will likely have demonstrated some tangible interest in this area by having previously built a digital product, had an idea for a business venture, took on a project related to technology, participated in a hackathon or build-a-thon, or some other relevant example. These students identify themselves as "builders," keen on hands-on application. They will have likely future interest in roles such as software engineering, product management, technical sales, or emerging roles such as AI operations or go to market (GTM) engineer.

The B.S. in Computer Science and Business will be structured in four key parts:

- **General Education and Pre-Major Coursework**
- **Blended Core:** The blended core includes a deliberate blend of foundational computer science and business courses that specifically prepare students with the knowledge, skills, and competencies needed to thrive in technology-centric organizations. Further, the blend of courses ensures a solid foundation in both technical and business understanding, deeply incorporates experiential learning, and allows students to pursue enough depth through credit hours in their specialization. Students will take two, new immersive courses in Technology Innovation (I and II) to get hands-on learning in building and launching products. They will further take foundational business courses across finance, operations, logistics, and marketing that have been/are being adapted to further incorporate contextual examples from the technology sector. The computer science courses blend foundational learning in software engineering, discrete structures, computer systems, and artificial intelligence (AI), with an experiential project course to build end-to-end full-stack web applications. A deliberate part of the core is also a design course in information design, to tie together data analysis, business context, and communication.
- **Two specialization options: Computer Science (CS) or Go to Market (GTM):** Students will have the option to specialize in either CS, with a focus on software engineering with AI, or GTM, with a focus on the business side of launching and growing products. A required part of the degree is the completion of a capstone course, which will be cross-listed across business and CSE and incorporate meaningful industry-pertinent projects. The capstone will blend students from each specialization track and is planned to be co-taught with business and CSE faculty, truly serving as an interdisciplinary capstone learning experience.
- **Concurrent, part-time co-op:** This is an innovative feature of this program, allowing students to work approximately 10–15 hours per week in paid technology and business roles related to their areas of interest in the degree while receiving credit towards their degree. The curricular credit emphasizes the integration of the work experience into the learning context to enhance a student's learning and application within their coursework. We expect that the co-op opportunities will be mainly remote or Columbus-based, which will allow for both domestic as well as international students to access.

External Relevant Program Examples

Below are some of the existing and emerging programs in the broader, nationwide landscape that are at the intersection of engineering and business. The programs range from being dual degree to single degree programs. Each is reporting growing signs of success in both student as well as employer interest.

- **University of Illinois Urbana-Champaign (UIUC)-** In 2013, UIUC approved the creation of blended computer science programs, labeled "CS + X." The launch included four pathway options for students and has since grown to over twelve, including areas

such as CS + Economics, CS + Astronomy, and more. As of 2023, the option with the highest enrollment was cited as CS + Economics.[8]

- **University of California Berkeley: Management, Entrepreneurship, & Technology (M.E.T.)** Launched in 2017 as a collaboration between the College of Engineering and the Haas School of Business, Berkeley M.E.T. is an example of a rigorous dual-degree program. Students earn two Bachelor of Science degrees, one in business and one in a selected field of engineering. The cited average starting salary for the class of 2025 from M.E.T is $153,000.[9]
- **Purdue University: Integrated Business and Engineering (IBE)** Purdue's BS in IBE degree launched Autumn of 2021. The program size has nearly doubled in just four years with 93 admissions in Autumn of 2021 and 161 admissions in Autumn of 2024. Application to admission rate for 2024 was 25%, with 640 applications.[10] The program also has an Innovation Lab, where students pursue experiential learning building and exploring emerging technology and also opportunities to engage with industry.
- **University of Arizona: Integrated Business Engineering (IBE)** Launching Autumn 2026, the University of Arizona's IBE degree combines engineering and business into a single degree.

Below are two well-known and regarded co-op models at universities, which emphasize the strength of pairing skill building with learning:

- **Northeastern University Cooperative Education**- Northeastern's model is well-known for the quality of experience and skills acquired by students. Students take a semester pause from studying to do a full-time co-op for the semester. Example employers are VMware and IBM. According to the program website, 97% of graduates are employed or in graduate school within 9 months, graduates command a 33% higher starting salary than the national average, and 58% of students receive job offers from their previous co-op employer, demonstrating the power of pairing work and study in securing high-leverage roles.
- **University of Cincinnati (UC) Co-op**: The University of Cincinnati has both programs that offer co-ops as optional as well as programs that require students participate in a co-op. According to the UC website, UC students participating in co-ops earned a collective $94 million in co-op wages, averaging $11,200 per semester. Critically, participants graduate with 12.2% lower student loan debt as compared to peers at other schools, which demonstrates the strong potential for paid co-ops to provide financial impact.

The demonstrated student and employer demand for interdisciplinary programs that integrate computing and business provides a strong market signal in support of the proposed Bachelor of Science in Computer Science and Business. Peer institutions offering programs that combine technical and business education have experienced significant growth in applications,

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[8] The Daily Illini. "CS + X programs see continued growth, expand into new fields." 2023. https://dailyillini.com/news-stories/2023/04/29/cs-x-programs-growth/#:~:text=The%20CS%20+%20X%20program%20has%2012,Some%20programs%20also%20have%20special%20blended%20courses.

[9] M.E.T Program Overview Brochure. 2025. https://issuu.com/ucberkeleymet/docs/m.e.t._program_overview_brochure_2025_update_nov25

[10] Purdue Daniels School of Business. 2024. https://business.purdue.edu/careers/resources/ibe-annual-report.pdf

enrollment, and employer engagement, reflecting broader labor market shifts toward roles that require graduates who can both develop technology as well as translate technical capabilities into business value.

However, these interdisciplinary programs combining engineering and business at other universities mostly emphasize engineering broadly or treat computing as one of several technical options. Few programs center specifically on the development and commercialization of digital technologies. The proposed degree addresses this gap by focusing on software, digital products, and AI-enabled services. Further, the design of the proposed program, due to the deep collaboration of the participating units, truly blends the disciplines into a seamless student experience. Establishing this program will strengthen Ohio State's portfolio of interdisciplinary undergraduate offerings while responding to clear student interest and evolving workforce needs.

Existing Pathways at Ohio State

There are currently some options for students interested in the intersection of computing and business. Demand for these programs represents the student and employer interest at the intersection of these fields. The current options, however, are not optimized for the deep blend of these two disciplines in a singular degree journey. The integration into one degree allows for the deep consideration of the skillset needed for the target student and allowance for time to pursue concurrent work experience.

Current options for students at the university, in addition to pursuing a single major such as computer science (CS), computer information systems (CIS), or business with a specialization are as follows:

- **Self-directed student major/minor completion:** Students pursuing a major in a particular area could additionally choose to pursue a minor in an area such as Computer Science or Business. In addition to their major coursework, students must sequence and complete 15 additional credit hours for the Business minor and 19 credit hours (16 for the minor + 3 for prerequisites) for the Computer Science minor on top of their primary degree/major credit hours.

- **Integrated Business & Engineering (IBE) Honors Program**: As a highly sought after, cohort, honors-level experience, IBE offers interdisciplinary learning through a major/minor combination for students and provides dedicated program support. The IBE program offers two tracks, IBE, where business majors complete an engineering sciences minor and engineering majors complete a business minor, and IBE-SI (Software Innovation), where business majors complete a computer science minor and engineering majors complete a software-adapted business minor. Due to being an honors program, each track limits acceptance to 36 incoming first year students. The IBE program and its student and employer demand shows strong signal and proof of not only the interest and need in this combined competency but also in the demonstrated ability of the colleges of engineering and business to tightly collaborate to deliver on one of the university's signature undergraduate experiences. In recent data, over 200 incoming honors first year

students in business and engineering applied to the program and 100% of students graduating from IBE accepted an employment offer within three months of graduation.

- **Information Systems specialization within the BSBA degree:** Offered through the Fisher College of Business, this specialization is the primary pathway for students who view technology through the lens of organizational management and enterprise systems. It provides an essential bridge for those focused on the strategic deployment of information technology within traditional business frameworks. The computer science courses in this program are focused on data and systems, while the proposed degree is focused on computer science courses related to software engineering and AI.

- **Bachelor of Arts in Computer and Information Science (BA CIS) with a Related Field in Economics, Accounting, and Business:** Upon completing this major, students graduate with a Bachelor of Arts from the College of Arts and Sciences with a major in Computer Information Science. The students can further pair computer science with various domains such as economics, accounting, and business at 18-26 credit hours.

Distinction of the Proposed Degree

The proposed Bachelor of Science in Computer Science and Business is designed to complement these successful models and meet emerging student and employer needs. The distinguishing factors are not only in the interdisciplinary curriculum but also in the deliberate program design.

- **Integrated into one degree pathway that preserves rigor-** The degree has been designed from the ground up thinking about this particular profile of student, their career ambitions, and how the work experience can truly be integrated into the learning. The total number of credit hours for the degree is 121 as compared to other cross-discipline options that can be 140+ credit hours.

  Every business course in the blended core is being or has been recently developed to not only teach strong foundations across finance, operations, marketing, and management, but also apply these foundations into technology contexts to promote active exploration of these evolving and dynamic topics in the classroom. Two new immersive, 6 credit hour courses that are being developed and launched this 2026-2027 academic year will become tentpole parts of the experience in this degree. Students will learn how to quickly ideate, build and launch products in teams utilizing the latest technology, breaking student preconceived thoughts on balancing speed and quality, thriving in ambiguity, and being resourceful in how to get to answers. The computer science courses in the blended core were specifically selected knowing the student “builder” profile. The computing and business coursework have been developed in coordination, ensuring that students do not just study two subjects in parallel, but learn to apply them in tandem.

  Further, the degree was specifically designed considering feedback and observations of non-computer science students taking computer science courses, ensuring that the courses in the major core can equally apply to both those prior coding experience and no prior

coding experience, while still preserving the rigor of those deeply interested in computer science through the specialization pathway.

- **Overcoming the translation gap-** Sequential business-first or CS-first models create a translation gap. Whether computing is taught first, or business is taught first, sequential models leave students struggling to translate strategic intent into implementable AI and software systems. An integrated and blended education eliminates this gap by design.

- **Integrated concurrent co-op-** In this program, students will be encouraged and supported in concurrent learning and gaining relevant work experience. While there are highly popular co-op programs at other institutions such as the University of Cincinnati and Northeastern University, students in these programs take a semester off to do a full-time co-op, which can lead to delays in graduation and break up the college experience. These programs also often do not offer degree credit for participation in the co-op. Currently at Ohio State we do not offer a formal co-op program. Further, to our knowledge, this proposed program is the first among universities to offer a concurrent, part-time paid co-op opportunity to students that not only allows for credit towards the degree but also will be integrated with relevant context into the course curricula. The concurrent co-op creates a real-time feedback loop between the classroom and workforce, fostering professional competency and tangible experience building unique to this degree path.

- **Opportunity for students to pay down the cost of education-** Through the co-op opportunity and the related support that will be provided by the Center for Software Innovation on securing corporate partnerships and job opportunities for students, students will have the opportunity to make meaningful wages in technology-centric jobs that they can utilize towards their cost of education.

- **Open to honors and non-honors students-** This program will be open for all students, honors and non-honors, to apply and will have capacity to support more students outside of honors program cohort limits.
- **Strong degree name with market signal-** The B.S. in Computer Science and Business name serves multiple, deliberate purposes. The degree demonstrates to students and parents that this is a rigorous degree while, for employers, clearly aligning the degree name to the competencies they seek for these roles. It also provides a clear signal of the importance Ohio State places on these workforce needs.

Over time, the Bachelor of Science in Computer Science & Business positions Ohio State as a leader in a new era of higher education. It does not replace the existing, essential pathways provided by the university's colleges; rather, it expands the university's portfolio with an innovative, strategically aligned model that meets the industry where it is heading.

4. Program Learning Outcomes and Evaluation

Expected Program Learning Outcomes

Students graduating with a Bachelor of Science in Computer Science & Business will have met the following learning outcomes.

Outcomes from the Major Courses (Blended Core)

M.1	Understand foundational business principles across organizational structure, business models, customer acquisition, revenue generation strategies, and unit economics to inform decision-making and operate within technology-driven organizations, products, and functions. **(Business)**
M.2	Analyze complex problems and opportunities, identify appropriate computing requirements, and apply mathematical foundations, algorithmic principles, and computer science theory, including artificial intelligence (AI), to design, implement, and evaluate system and product architectures. Demonstrate a structured, engineering-based approach to constructing technology-enabled solutions, and evaluate tradeoffs in scalability, performance, security, maintainability, efficiency, and sustainability under realistic constraints. **(Computer Science)**
M.3	Design user-centered technology solutions by identifying emotional, functional, and contextual user needs, translating insights into actionable requirements, and shaping cohesive end-to-end user experiences. Develop functional minimum viable products (MVPs) through coding and prototyping, evaluate technical quality and feasibility, and iteratively refine solutions through experimentation, data analysis, testing, and feedback using modern engineering tools (including AI) and development practices. **(Design and Development)**
M.4	Practice ability to scope, plan, and deliver technology-enabled products and projects by collaboratively defining technical and functional requirements, clearly communicating product and technical concepts in written and oral forms, and producing actionable documentation such as roadmaps. Work effectively across multidisciplinary, cross-functional teams to identify, formulate, and solve engineering problems throughout the full product development lifecycle. **(Product Development Lifecycle)**
M.5	Create and deploy functional prototypes in target user environments by applying adaptive and reflective product development practices, iterating through testing, feedback, and learning from failure. Analyze business, user, and system data; apply statistical and computational methods to evaluate product performance; and assess tradeoffs among technical, business, and user-centered metrics to inform product decisions for digital and technology- and AI-enabled services. **(Build, Assess, Iterate)**
M.6	Evaluate product and organizational opportunities using data-informed reasoning, considering system-level, business-level, and societal impacts, and to apply user-centered design methods to create responsible technology solutions. Assess ethical, legal, social, and economic implications and make informed decisions within complex, interconnected environments. **(Responsible and Critical Thinking, Data-Drive Decision-Making)**

Outcomes from Computer Science Specialization

Adapted from BS CIS degree outcomes which were in turn taken from the ABET CAC Outcomes for CS Programs

S.1	Analyze complex computing problems and design, implement, and evaluate computing-based solutions by applying core computer science principles, including algorithms, systems, and artificial intelligence, together with relevant disciplinary knowledge, to meet specified requirements within real-world constraints.
S.2	Apply computer science theory, software development fundamentals, and core principles of software engineering and artificial intelligence to design and implement robust computing-based solutions for problems arising in interdisciplinary settings.
S.3	Communicate effectively across professional and interdisciplinary contexts, function productively as a team member or leader, and make informed, ethical, and legally grounded judgments in computing practice.

Outcomes from the Go to Market (GTM) Specialization

S.4	Design and execute systematic customer discovery processes to validate product-market fit, including identifying early adopter segments, conducting problem and solution interviews, and synthesizing insights to refine value propositions for technology products.
S.5	Develop comprehensive go-to-market strategies for technology innovations by analyzing competitive positioning, selecting appropriate distribution channels, designing pricing models that align with customer willingness-to-pay, and creating launch roadmaps that sequence market entry activities.
S.6	Establish and interpret key performance indicators for technology product growth, including customer acquisition costs, lifetime value, activation rates, and retention metrics, and use data-driven experimentation to optimize go-to-market tactics across the customer journey.

Through course projects and the capstone, the students will be familiar with critical thinking that enables them to appropriately identify questions and design methodologies to address those questions, realize implementations, and systematically evaluate and analyze the results of the design. They will also master both oral and written presentations to audiences with varied backgrounds. Given the extended immersion in industry, the students will have the opportunity to constantly hone and enhance their skill sets. Thus, the enrolled students will be able to quickly adapt to a dynamic landscape.

The students will work closely with their advisor to make sure their learning goals will be clear from the beginning and satisfied at program completion. The program will work with the students early to emphasize what they are expected to know, and the mindset, skills, and technical knowledge they should acquire from this program.

Alignment with AI Fluency

In 2025, the university announced its AI Fluency initiative, with the aim for all undergraduate students graduating from Ohio State, starting with the Class of 2029, to be AI fluent- fluent in the application of AI to their field of study. AI Fluency and its related learning outcomes are deeply

embedded in this degree and the program will work in accordance with reporting or assessment requirements of that initiative.

The university's AI Fluency learning outcomes are as follows:

- Explain foundational concepts such as artificial intelligence, large language models, machine learning
- Explore the potential benefits and limitations of common AI applications in the context of a chosen field
- Evaluate the types of inputs and outputs foundational to AI systems- including data, prompts, commands and emerging modalities- and explain how input form and quality influence output quality, performance and reliability
- Use AI tools to accomplish specific goals in the field of study, and critically assess outputs for accuracy and relevance to the task
- Design innovative applications of AI within a discipline, supported by a rationale for the potential value and feasibility
- Explore the implications (ethical, societal, environmental, legal, practical) of AI use cases and develop reasoned recommendations for responsible implementation within a field of study

Program Assessment Plan

Program objectives will be assessed using indirect and direct measures. Program assessment will focus across three main areas:

- **Expected learning outcomes (ELOs)**- Assessment of the program's achievement of the ELOs across the blended core and specializations
- **Program design and delivery**- Monitoring the effectiveness of the blended core, specialization pathways, experiential learning, and integration of concurrent professional experience with the curriculum
- **Student experience, engagement, and post-graduation outcomes**- Monitoring of retention, academic performance, co-op experiences and career readiness.

Assessment activities will occur annually and be reviewed by the program's Faculty Director(s) and a joint oversight committee representing, at minimum, the College of Engineering, Fisher College of Business, and the Center for Software Innovation.

- **Program level metrics-** Based on availability, the following data will be collected and analyzed to improve the quality of the program:
    - Number of applications to program annually
    - Program admissions (% admitted, % matriculated)
    - Student retention rates
    - Cumulative student GPAs
    - Time to degree
    - Graduation rates
    - Co-op placement rates and employer distribution

    - Career placement and average starting salaries
    - Student surveys (discussed below)
    - Student evaluations of instruction (SEI)
    - Alumni surveys to determine applicable employment and use of degree.

- **Direct measures of student learning:**
    - **Course embedded assessments-** Instructors will use rubrics aligned to the program's expected learning outcomes to assess M.1-M.6 major and S.1-S.6 specialization outcomes. Artifacts may include prototypes, product specification documentation, code repositories, business analyses, and more. Please see **Exhibit A in** the Appendix for the learning outcome mapping.
    - **Project and capstone evaluation-** Both CSE3901 and the capstone course will have rubric-based assessment, evaluating the following. The joint oversight committee will review a sample of student work each year:
        - Application of interdisciplinary methods
        - Team collaboration and project leadership
        - Data-driven decision-making
        - Communication across audiences
        - Integration of relevant AI tools
    - **Co-op work experience assessment-** Because the program includes a required part-time work experience, we will collect and review the following data:
        - Faculty evaluations
        - Student reflective report linking coursework to workplace application
        - Performance-based assessments from students demonstrating industry-aligned skill development
- **Indirect measures of learning and program quality**
    - **Student surveys:** Annual surveys will gather data on:
        - Perceived mastery of interdisciplinary skills
        - Confidence in applying computer science and business concepts
        - Experience with team-based learning and concurrent co-op model
        - Satisfaction with advising, course availability, and workload balance
    - **Student evaluations of instruction (SEI)**
    - **Exit survey-** Graduating students will complete an exit survey addressing:
        - Overall program satisfaction
        - Preparation for industry roles
        - Quality of experiential learning
        - Suggestions for program improvement
        - Post-graduation work placement
    - **Alumni survey (1- and 3-years post-graduation)-** will assess:
        - Employment outcomes
        - Relevance of skills acquired
        - Advancement in desired career path
        - Long-term value of the concurrent co-op model
- **Continuous improvement process-** Assessment findings will be reviewed annually by the joint committee and shared with the participating colleges. The review cycle will include:

- Data collection (each academic year)
- Committee review and interpretation
- Action planning based on results
- Implementation and monitoring

5. Student Enrollment and Admissions

Students will have the following options for being admitted into the program:

- **Direct admission through the university application-** The degree will be listed as an option in the university application process. The program team will work closely with the admissions team to specify the relevant criteria for admission
- **Pre-major to application pathway -** Students that have been admitted to the university will have the opportunity to apply to the program on a rolling basis leading up to and during their first year at the university. Students interested in the program can seek academic advising to ensure their first-year course selections contribute to degree progression. The application will include a cover letter with specific questions answered, an example of a project or product that was created or built, and a resume. This application process will be similar to that of the Data Analytics major.

Projected student enrollment is below, based on applications for the Integrated Business and Engineering (IBE) program as well as data on students pursuing major/minor combinations across business and computer science:

	Autumn 2027	**Autumn 2028**	**Autumn 2029**	**Autumn 2030**
Incremental students admitted	100	200	200	200
Cumulative students in program	100	300	500	700

6. Curricular Requirements

The B.S. in Computer Science and Business will require successful completion of the following:

General Education (GE)	32-39 credit hours
Required Non-Major Coursework	20 (potential for 11 credit hour GE overlap)
Major Coursework	51
Co-op	1-3
Specialization Coursework	27-29
Minimum Total Credit Hours	121

In the Appendix are the following:

- **Exhibit B-** B.S. in Computer Science and Business Curricular Requirements and Course Descriptions
- **Exhibit C-** Computer Science Specialization Requirements and Sample Schedule

- **Exhibit D-** Go to Market Specialization Requirements and Sample Schedule

Accreditation

This degree will be part of the Fisher College of Business college level accreditation with the Association to Advance Collegiate Schools of Business (AACSB) and under the university's overall accreditation with the Higher Learning Commission. The degree does not plan at this time to seek accreditation from the Accreditation Board for Engineering and Technology (ABET), however the computer science education of the core and specialization were developed with consideration of ABET guidelines.

7. Program Faculty and Program Management

The program will draw upon the deep expertise existing in the university and, due to its innovative and interdisciplinary nature, we expect that it will attract new faculty and lecturers.

Many of the proposed courses are in subject areas for which we have existing faculty as subject matter experts to assist in course development and/or in teaching. The list of faculty below demonstrates that we have the existing expertise to be able to develop and deliver on this program. Not all of the listed faculty will teach in this program. For six of the listed positions below, the colleges were provided startup and ongoing endowment funds through the Center for Software Innovation (CSI) to establish the positions with focus areas related to digital technology.

Given the rapid pace of change in the areas of computer science and business and the emphasis in this program on experiential learning, we also plan to consider lecturer, adjunct, and related positions that allow industry to be part of the teaching experience, while ensuring there is strong faculty oversight and necessary balance within the colleges for tenured positions.

Current Faculty

Name	Unit	Professional Rank
Dr. Jeff Dotson	Business	Associate Professor ; CSI Faculty Director
Dr. Carter Davis	Business	Assistant Professor
Dr. Nima Safaei	Business	Assistant Professor
Dr. Roger Bailey	Business	Clinical Assistant Professor
Mike Isler	Business	Lecturer
Srini Koushik	Business	Senior Lecturer
Dr. Arnab Nandi	CSE	Professor; CSI Faculty Director
Dr. Michael Robbeloth	Engineering Education	Assistant Professor of Practice
Dr. Paolo Bucci	CSE	Senior Lecturer
Dr. Pooya Hatami	CSE	Assistant Professor
Dr. Jamie Kelley	CSE	Professional Practice Assistant Professor
Dr. Jeremy Morris	CSE	Professional Practice Assistant Professor
Dr. Paul Sivilotti	CSE	Associate Professor

Dr. Rajiv Ramnath	CSE	Professional Practice Professor
Dr. Thomas Bihari	CSE	Professional Practice Associate Professor
Dr. Raef Bassily	CSE	Associate Professor
Dr. Athreya Kanan	CSE	Professor
Dr. Andrew Perrault	CSE	Assistant Professor
Dr. Spyros Blanas	CSE	Associate Professor
Dr. John Paparrizos	CSE	Assistant Professor
Dr. DK Panda	CSE	Professor
Dr. Zhiqiang Lin	CSE	Professor
Dr. Zhihui Zhu	CSE	Assistant Professor
Dr. Sachin Kumar	CSE	Assistant Professor
Dr. Donald Williamson	CSE	Associate Professor

Additional Faculty to be Hired

Status	Department	Professional Rank
Active Posting	Computer Science	Tenure track open rank
Active Posting	Computer Science	Professor of practice open rank
Proposed	Business	Lecturer / Senior Lecturer

Program Management

As mentioned in the Program Learning Outcomes section, there will be a joint committee overseeing the delivery and success of this program.

The committee will include, at minimum, one faculty member from the Fisher College of Business, one faculty member from the College of Engineering, and the Executive Director of the Center for Software Innovation. The represented faculty may overlap with the Faculty Directors. The Faculty Director from the Fisher College of Business and the Executive Director of the Center for Software Innovation will co-chair this committee.

The committee will meet twice per year, which may overlap with the meetings for the Center for Software Innovation Oversight Committee.

8. Program Costs and Funding

Below are some of the projected areas of program cost required:

- **Academic advising (estimated $40K/yr)-** The program will leverage existing academic advisors in the College of Engineering and in the Fisher College of Business, but will also require additional advising capacity in both colleges given the cross-college courses and co-op.
- **Co-op program and student experience management (estimated $80K/yr)**- In order to support the ongoing co-op experience, the Center for Software Innovation (CSI) will

hire a co-op manager that will also be managing student experience throughout the program. This role will partner closely with the career service offices.
- **Job and corporate partnership development (estimated $110K/yr)-** To secure co-op opportunities and work projects for courses, CSI will leverage the existing CSI Director of Engagement and Development as well as hire an additional corporate partnerships analyst identify and secure student co-op opportunities.
- **Faculty directors (estimated $50K/yr)-** To support the success and growth of the program, the program plans to have two faculty directors: one in the Fisher College of Business and one in the College of Engineering.
- **Faculty and teaching capacity-** Additional faculty have been and are being hired to support the program. We will also look to including capacity for involvement of industry experts as lecturers, adjuncts, etc.
- **Other program startup costs-** As the program starts, we may look to fractional instructional design help as well as marketing capacity for the program positioning and student and employer marketing.

The following are the known or expected sources of funding:

- **Tuition revenue**
- **Program Fee-** While both the Fisher College of Business and the College of Engineering assess a program fee for all undergraduate students, the amounts currently differ. Because the teaching and support structure of the program is shared nearly evenly between the two colleges, the colleges are discussing the implementation of a blended program fee that more appropriately reflects the shared costs of instruction and student support services.
- **Philanthropy:**
    - In 2022, the Timashev Family Foundation made a pledge of $110 million to support the establishment of CSI and its academic and innovation focused mission. Included in this gift are funds towards space in a new building, endowment funds towards faculty as mentioned in the faculty section, endowment funds towards student scholarship, and funding for CSI operations including compensation towards the Executive Director of CSI and CSI Director of Engagement and Development. Many of these areas will support this program
    - In 2025, The Timashev Family Foundation made an additional pledge of $15 million to support this new program.
- **Corporate partnership (potential)-** As the program builds relationships with industry for the program, it may also pursue philanthropic gifts in partnership with the Corporate Partnerships and Relations team.

The cost of the foundational operations of the degree will be covered by the tuition revenue, program fee, and endowment funds for the faculty positions. Any of the additional components, such as the additional academic advising, faculty directors, co-op manager, and corporate partnerships analyst, outlined above will be covered by the gift funds.

9. Facilities and Equipment Requirements

- **Facilities-** Classroom space is largely expected to be provided from the relevant colleges, primarily the College of Engineering and Fisher College of Business. Depending on other

initiatives, we may look at space availability, if needed, in the Student Entrepreneurship Center, Pomerene Hall, and the planned space for the Center for Software Innovation, which includes plans for active learning classrooms. The capacity needs for this program are also being incorporated into the Fisher College of Business capacity planning.

- **Equipment-** Students and faculty will need a laptop computer. They will also need access to certain software, such as Google Gemini or other university-compliant products that will be relevant for the coursework.

10. Appendix

Exhibit A: Learning Outcomes Mapping

Program Outcomes
0-nothing, 1- minor (1-2 hours), 2- (3-6 hours), 3 (7+ hours)

Course	M.1	M.2	M.3	M.4	M.5	M.6	S.1	S.2	S.3	S.4	S.5	S.6
Required Pre-Major and Major												
MATH1151: Calculus I		2										
CSE1223 or 1224: Intro to Computer Programming		3					3	3				
STAT2450: Introduction to Statistical Analysis I		2										
ECON2001.01: Microeconomics	2											2
ACCTMIS2200: Financial Accounting	2											2
ENGLISH1110.01: First-Year English Composition						2						
CSE2501: Social, Ethical, and Professional Issues in Computing						3			3			
BUSADM2XXX: Foundations of Tech Innovation I	3		3		3	2						
BUSADMXXXX: Foundations of Tech Innovation II	3	1		1	3	3						
DESIGN5505: Information Design			3	2	3				3			
BUSOBA3XXX: Digital Product Management and Innovation	2			3		3				2		3
BUSFIN3XXX: Finance in Technology	2					3						3
BUSML3XXX: Strategy and Tactics of Software Marketing	2		3			3				3	3	3
CSE2221: Software I		3					3	3				
CSE2231: Software II		3					3	3	2			
CSE2321: Foundations I: Discrete Structures		3					3	3				
CSE3430: Computer Systems Overview		3					3	3				
CSE252X: AI Foundations		3					3	3				
CSE 3901: Project: Design, Development, and Documentation of Web Applications (full stack)		3	2	2	3		3	3	3			

CSE591X/BUSADM5XXX: Capstone		3	2	3	3	3	3	3	3	3	3	3
Computer Science Specialization												
CSE2XXX/BUSADM2XXX: Co-op	2	3	2	3	2	2	3	3	3	3	3	3
Math 2568: Linear Algebra		2					2					
CSE3231: Software Engineering Techniques		3	3	3	3	2	3	3	2			
CSE3241: Introduction to Database Systems		3	2	2	2		3	3	2			
CSE3232: Requirements Analysis		3	3	3	3	2	3	3	2			
Math 1152: Calculus II		2					2					
CSE2331: Foundations II: Data Structures and Algorithms		3					3	3				
MATH3345 Foundations of Higher Mathematics		2					2					
CSE3461: Computer Networking and Internet Technologies		3					3	2				
CSE3521: Survey of Artificial Intelligence		3					3	3				
CSE5234: Distributed Enterprise Computing		3	2	3			3	3				
CSE5235: Applied Enterprise Architectures and Services		3	2	3			3	3				
CSE5236: Mobile Application Development		3	2				3	2				
CSE5242: Advanced Database Management Systems		3	2	2	2		3	3	2			
CSE5243: Introduction to Data Mining		3	2	1	2		3	3				
CSE5442: High-Performance Deep/Machine Learning		3					3	3				
CSE5474: Software Security		3	3				3	3				
CSE5523: Machine Learning and Statistical Pattern Recognition		3					3					
CSE5524: Computer Vision for Human-Computer Interaction		3					3					
CSE5525: Foundations of Speech and Language Processing		3					3					
CSE5251: Intro to Software Startups	3	2	3	3	3	3	3	3	3	3	3	3
CSEXXXX: Introduction to Neural Networks		3					3					
Go to Market (GTM) Specialization												

CSE2XXX/BUSADM2XXX: Co-op												
BUSML4202: Marketing Research	2		3			3				2	1	3
BUSMHR320X: Organizational Behavior and HR	3					2						1
BUSML4223: Foundations of Strategic Sales	2									2	3	2
BUSML4225: Applied Strategic Sales	2									2	3	2
BUSML4224: Strategic Sales Leadership	2									2	3	2
BUSML4232: Digital Marketing	2										3	3
BUSML4201: Consumer Behavior	1		3		2	3				3		
BUSML4240: New Product Management					3					3	3	3
BUSML4241: Entrepreneurial Marketing	2		2		2					3	2	2
BUSML4210: Advanced Market Research	2		3		2	3				2	1	3
CSE5251: Intro to Software Startups	3	2	3	3	3	3	3	3	3	3	3	3
BUSADMXX: Advanced Topics in Tech Operations	3		3		3	3				3	3	3

Exhibit B: B.S. in Computer Science and Business Curricular Requirements and Course Descriptions

General Education Requirements		
GE Launch Seminar	GENED 1201	1
Foundations: Writing and Information Literacy*	Student Choice	3
Foundations: Mathematical & Quantitative Reasoning/Data Analysis*	Student Choice	3-5
Foundations: Literary, Visual and Performing Arts	Student Choice	3
Foundations: Historical & Cultural Studies	Student Choice	3
Foundation: Natural Science	Student Choice	4-5
Foundations: Social & Behavioral Sciences*	Student Choice	3
Foundations: Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World	Student Choice	4-6
Theme: Student Choice	Student Choice	4-6
GE Reflection	GENED 4001	1
General Education Credit Hours		32-39

Required Non-Major Coursework		
Requirement	Course Options	Hours
First-Year English Composition*	English1110	3
Calculus I*	Math1151	5
Intro to Computer Programming	CSE 1223 or 1224	3
Introduction to Statistical Analysis I	STAT2450	3
Microeconomics*	ECON2001.01	3
Financial Accounting	ACCTMIS2200	3
Credit Hours		20
With GE Overlap Total Hours (indicated by *)		11

Major Coursework		
Course	Title	Hours
BUSADM1100	College Survey	1
CSE2501**	Social, Ethical, and Professional Issues in Computing	1

BUSADM2XXX	Foundations of Tech Innovation I	6
BUSADM2XXX	Foundations of Tech Innovation II	6
DESIGN5505	Information Design	3
BUSOBA3XXX	Digital Product Management & Innovation	3
BUSFIN3XXX	Finance in Technology	3
BUSML3XXX	Strategy and Tactics of Software Marketing	3
CSE2221	Software I	4
CSE2231	Software II	4
CSE2321	Foundations I: Discrete Structures	3
CSE3430	Computer Systems Overview	4
CSE252X	AI Foundations (new course)	3
CSE3901	Project: Design, Development, and Documentation of Web Applications (Full Stack)	4
CSE591X/BUS5XXX	Capstone	4
Major Core Credit Hours		51

Specialization	
Specialization Credit in either Computer Science or Go to Market	27-29

** PHIL2338, which overlaps with the GE requirement Theme: Citizenship for a Diverse & Just World, is an allowable substitute for CSE2501

Course Descriptions for Required Major Courses

- **BUSADM1101 College survey course-** For students that direct admit they will take BUSADM1101. If first admitted into a different college, the student will take that college's survey course
- **CSE2501 Social, Ethical, and Professional Issues in Computing-** This course is required is PHIL2338 was not already taken. PHIL2338 can count also as GE overlap
- **BUSADMXXXX Foundations of Tech Innovation I and BUSADMXXXX Foundations of Tech Innovation II-** These are two new courses that were approved by CAA on February 18, 2026, as part of the Technology Innovation Specialization in the BSBA degree in the Fisher College of Business. The course syllabi are going through curricular review in the Fisher College of Business and are planned to be offered starting the 2026-2027 academic year
    - **BUSADM2XXX Foundations of Tech Innovation I (new course)-** Introduces opportunity discovery, customer validation, and business model design through a compressed, project-based format. Teams develop validated problem statements,

test solution viability, and produce minimum viable product (MVP) specifications ready for development.
    - **BUSADM2XXX Foundations of Tech Innovations II (new course)-** Develops product development and go-to-market execution skills through hands-on MVP construction and growth strategy implementation. Teams launch live products, generate measurable traction, and present investor-ready pitches with commercialization strategies. Pre-req: Foundations of Tech Innovations I.
- **DESIGN5505 Information Design (existing course)-** Design principles related to visualizing quantitative information, processes and systems. No pre-requisites. We have approval and support from the chair of the Department of Design for inclusion of this course in the program.
- **BUSOBA3XXX Digital Product Management and Innovation (new course)-** This course has already been developed as BUSOBA3243H, offered as an honors course as part of the Integrated Business and Engineering- Software Innovation (IBE-SI) program. The first offering of this course is Spring 2026. The course will be modified to be offered as a non-honors course. The course is intended to address foundational operations and product development topics customized to the digital environment. The foundational topics include quality management, capacity planning, inventory management, and constraint/lean management principles. The product development in the digital environment component includes types of digital innovations, collaboration, and supply chain issues in the digital environment, tools for managing the new product development process (e.g., stage gate, agile, and waterfall processes), and prototyping and forecasting best practices.
- **BUSFIN3XXX Finance in Emerging Technology (new course)-** This course was proposed as BUSFIN3220H as a future part of the IBE-SI program. It will created for the B.S. in Computer Science and Business as a non-honors course. The first part includes classic financial topics like capital budgeting, building proforma projections, and risk. In addition to foundational issues in finance, the course will include emerging issues in digital and entrepreneurial finance. The pre-requisite for this course will be ACCTMIS2200: Financial Accounting.
- **BUSML3XXX The Strategy and Tactics of Software Marketing (new course)-** This course has already been developed as BUSML3245H and will be modified to be a non-honors course. This course provides an overview of the economics and marketing strategies essential for success in the software industry. Students will gain an understanding of the unique economic factors influencing software products, including pricing models, market competition, and the impact of network effects.
- **CSE2221 Software I (existing course)-** Intellectual foundations of software engineering; design-by-contract principles; mathematical modeling of software functionality; component-based software from client perspective; layered data representation. Prerequisites: 1212, 1221, 1222, 1223, 1224, Engr 1221, 1281.01H, 1281.02H, or CSE Placement Level A. Prerequisites or concur: Math 1151, 1161.01, or 1161.02.
- **CSE2231 Software II (existing course)-** Data representation using hashing, search trees, and linked data structures; algorithms for sorting; using trees for language processing; component interface design; best practices in Java. Must have credit for CSE 2221 and Math 1151

- **CSE2321 Foundations I: Discrete Structures (existing course)-** Propositional and first-order logic; basic proof techniques; graphs, trees; analysis of algorithms; asymptotic analysis; recurrence relations. Must have credit for CSE 2221 and Math 1151
- **CSE3430 Overview of Computer Systems for Non-Majors (existing course)-** Introduction to computer architecture and organization at machine and assembly level; pointers and addressing using C programming; introduction to operating system concepts: process, memory management, file system and storage, and multi-threaded programming. Prerequisites: 2122, 2123, or 2231; and 2321
- **CSE252X AI Foundations (new course)-** Foundational AI ideas, including machine learning and neural networks. Planned Pre-req: CSE2221. May require CSE2231.
- **CSE3901 Project: Design, Development, and Documentation of Web Applications (Full Stack) (existing course)-** Intensive group project involving design, development, and documentation of a web application; client-side and server-side scripting; communication skills emphasized; builds programming maturity. Prerequisites: 2231; and 2321; and 2421 or 3430, or 2451 and ECE 2560.
- **CSE591X/BUSADM5XXX Capstone (new course)-** This will be a cross-listed, co-taught design project course. Capstone design project. Prerequisites: CSE3901 and BUSADM2XXX Tech Innovation I

Exhibit C- Computer Science Specialization and Sample Schedule

Computer Science Specialization Required Courses			
Course	Title	Hours	Prerequisites
CSE2XXX/BUSADM2XXX[r]	Co-op or project course	1-3	None
Math25XX	Linear Algebra	3	Pre-requisite C- or above in CSE2321**
CSE3231	Software Engineering Techniques	3	Prereq: 3901 or 3902 or 3903
CSE3241	Introduction to Database Systems	3	Prereq: 2133 or 2231; and 2321 or Math 2366
CSE3232	Requirements Analysis	3	Prereq: 3241, 3901, 3902, 3903, or 5241
Specialization Electives	Student choice from approved list	6-8	N/A
Other Electives	Student choice	6-8	N/A
Specialization Credit Hours		27-29	

Computer Science Electives		
Course	Title	Hours
CSE2XXX[r]	Co-op	1-3
MATH1152	Calculus II	5
CSE2331	Foundations II: Data Structure & Algorithms	3
MATH3345	Foundations of Higher Mathematics	3
CSE3461	Computer Networking and Internet Technologies	3
CSE3521	Survey of Artificial Intelligence	3
CSE5234	Distributed Enterprise Computing	3
CSE5235	Applied Enterprise Architectures and Services	3
CSE5236	Mobile Application Development	3
CSE5242	Advanced Database Management Systems	3
CSE5243	Introduction to Data Mining	3
CSE5442	High-Performance Deep/Machine Learning	3
CSE5523	Software Security	3
CSE5524	Machine Learning and Statistical Pattern Recognition	3

CSE5525	Computer Vision for Human-Computer Interaction	3
CSE5526	Foundations of Speech and Language Processing	3
CSE5251	Intro to Software Startups	3
CSEXXXX	Introduction to Neural Networks	3

[r] indicates the course may be taken multiples times for credit

Course Notes

- **Stat2450** as a pre-major requirement is calculus-based statistics and is an allowable statistics substitute by Computer Science and Engineering (CSE)
- ****MATH25XX Linear Algebra-** Pre-requisite C- or above in CSE2321 and MATH1152. We have a request to the math department through the Office of Undergraduate Education to create a version of MATH2568 Linear Algebra, which is a required course in the Computer Science specialization, to not have MATH1152 Calculus II be a required pre-requisite. MATH1152 is listed as an elective option under this degree. Prerequisites: C- or above in CSE2321
- **CSE2XXX and BUSADM2XXX Co-op-** These courses are required in each specialization as intended paid, cooperative education that can be taken alongside curriculum. Calculation of work to credit hours is pending input from the Ohio Department of Education. The course may be repeated over the course of the degree for a maximum of 5 total credit hours allowed towards the degree. Credit hours beyond 3 count towards the “Other Electives” credit

Computer Science Specialization Sample Schedule

Autumn Semester 1st Yr			Spring Semester 1st Yr	
College Survey	1			
English 1110 First-year English Composition	3		ACCTMIS2200 Financial Accounting	3
MATH1151 Calculus I	5		Software I	4
ECON2001.01 Microeconomics	3		GE Historical and Cultural Studies	3
CSE1223 or 1224 Into to Programming	3		Stat2450: Introduction to Statistical Analysis	3
GE Launch GENED1201	1		Foundations: Literary, Visual, and Performing Arts	3
Total Credit Hours	**16**		**Total Credit Hours**	**16**

-

Autumn Semester 2nd Yr			Spring Semester 2nd Yr	
Theme: Citizenship for a Diverse and Just World	4		CSE2231 Software II	4
BUSADMXXXX: Tech Innovation I	6		GE Natural Science	4
BUSADMXXXX: Tech Innovation II	6		CSE2321: Foundations I	3
			BUSML3XXX: Strategy and Tactics of Software Marketing	3
			Design5505	3
Total Credit Hours	**16**		**Total Credit Hours**	**17**

-

Autumn Semester 3rd Yr			Spring Semester 3rd Yr	
MATH25XX Linear Algebra	3		CSE3901 Project	4
CSE252X AI Foundations	3		BUSFIN3XXX Finance in Technology	3
CSE3430 Computer Systems Overview	4		BUSOBA3XXX Digital Product Management and Innovation	3
			CSE3231 Software Engineering Techniques	3
CSE3241 Introduction to Database Systems	3		CSE2XXX Co-op	1
CSE2XXX Co-op	1			
Total Credit Hours	**14**		**Total Credit Hours**	**14**

-

Autumn Semester 4th Yr			Spring Semester 4th Yr	
CSE591X Capstone	4		Elective	3

CSE3232 Requirements Analysis	3		Elective	3
GE Race Gender Ethnic Diversity	3		GE Reflection GENED4001	1
Elective	3		Theme Student Choice	4
CSE2XXX Co-op	1		Elective	3
Total Credit Hours	**14**		**Total Credit Hours**	**14**

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Exhibit D- Go to Market Specialization Requirements and Sample Schedule

Go to Market Specialization Required Courses			
Course	Title	Hours	Prerequisites
BUSADM2XXX/CSE2XXX[r]	Co-op	1-3	None
BUSML4202	Marketing Research	3	See notes
BUSMHR320X	Organizational Behavior and HR	3	None
BUSML42XX	Software Sales and Go to Market	3	
Specialization Electives	Student choice from approved list	9-11	
Other Electives	Student choice	6-8	
Specialization Credit Hours		27-29	

Go to Market Specialization Electives		
Course	Title	Hours
BUSML4223	Foundations of Strategic Sales	3
BUSML4225	Applied Strategic Sales	3
BUSML4224	Strategic Sales Leadership	3
BUSML4232	Digital Marketing	3
BUSML4201	Consumer Behavior	3
BUSML4240	New Product Management	3
BUSML4241	Entrepreneurial Marketing	3
BUSML4210	Advanced Market Research	3
CSE5251	Intro to Software Startups	3
BUSADM4XXX[r]	Advanced Topics in Tech Operations	3

[r] indicates the course may be taken multiples times for credit

Course Notes:

- **BUSML4202** pre-requisites may change due to other Fisher College of Business curriculum changes. Further, we will look at the newly created courses in this program to be potential substitutes of the listed pre-requisites. Current pre-requisites- 3250 (650), and AcctMIS 2200 (211) , 2300 (212), and BusMGT 2320 (330), 2321 (331); and BusMHR 2291 or 2292 (BusADM 499.01)
- **BUSML42XX** is a new course on software sales and go to market to be developed in collaboration with the sales certificate faculty and leadership
- **CSE2XXX and BUSADM2XXX Co-op-** These courses are required in each specialization as intended paid, cooperative education that can be taken alongside curriculum. Calculation of work to credit hours is pending input from the Ohio Department of Education. The course may be repeated over the course of the degree for a

maximum of 5 total credit hours allowed towards the degree. Credit hours beyond 3 count towards the “Other Electives” credit

- **BUSADM4XXX Advanced Topics in Tech Operations-** This offers student the opportunity to understand and build proficiency in timely topics in technology. There is no limit on the number of times a student can take the course, which will apply towards their elective limits

Go To Market Specialization Sample Schedule

Autumn Semester 1st Yr			**Spring Semester 1st Yr**	
College Survey	1			
English 1110 First-year English Composition	3		ACCTMIS2200 Financial Accounting	3
MATH1151 Calculus I	5		Software I	4
ECON2001.01 Microeconomics	3		GE Historical and Cultural Studies	3
CSE1223 or 1224 Intro to Programming	3		Stat2450: Introduction to Statistical Analysis	3
GE Launch GENED1201	1		Foundations: Literary, Visual, and Performing Arts	3
Total Credit Hours	**16**		**Total Credit Hours**	**16**

-

Autumn Semester 2nd Yr			**Spring Semester 2nd Yr**	
Theme: Citizenship for a Diverse and Just World	4		CSE2231 Software II	4
BUSADMXXXX: Tech Innovation I	6		GE Natural Science	4
BUSADMXXXX: Tech Innovation II	6		CSE2321: Foundations I	3
			BUSML3XXX: Strategy and Tactics of Software Marketing	3
			Design5505	3
Total Credit Hours	**16**		**Total Credit Hours**	**17**

-

Autumn Semester 3rd Yr			**Spring Semester 3rd Yr**	
BUSMHR320X Organizational Behavior and HR in Technology	3		CSE3901 Project	4
CSE252X AI Foundations	3		BUSFIN3XXX Finance in Technology	3
CSE3430 Computer Systems Overview	4		BUSOBA3XXX Digital Product Management and Innovation	3
BUSML4242 Marketing Research	3		BUSML42XX Software Sales and Go to Market	3
BUSADM2XXX Co-op	1		BUSADM2XXX Co-op	1
Total Credit Hours	**14**		**Total Credit Hours**	**14**

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Autumn Semester 4th Yr		**Spring Semester 4th Yr**

BUSADM5XXX Capstone	4		Elective	3
Elective	3		Elective	3
GE Race Gender Ethnic Diversity	3		GE Reflection GENED4001	1
Elective	3		Theme Student Choice	4
BUSADM2XXX Co-op	1		Elective	3
Total Credit Hours	**14**		**Total Credit Hours**	**14**

-

Exhibit E Letters of Support

- Interim Dean Dr. Aravind Chandrasekaran
- Dr. Anish Arora
- Dr. Walter Zinn
- Dr. Fabienne Munch
- Cory Matyas

THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS

Office of the Dean
201 Fisher Hall
2100 Neil Avenue
Columbus, OH 43210-1144

614-292-2666 Phone
fisher.osu.edu

March 11, 2026

Vice Provost W. Randy Smith
Council on Academic Affairs
Office of Academic Affairs
University Square South Suite 400
15 E 15th Ave
Columbus, OH 43201

Dear Vice Provost Smith and Members of the Council on Academic Affairs:

I am writing to express my strong support for the establishment of the proposed Bachelor of Science in Computer Science and Business. This interdisciplinary degree represents an important advancement for our institution and aligns strongly with Fisher College of Business's strategic priorities and longstanding commitment to innovation, experiential learning, and cross-college collaboration.

The integration of computer science with core business competencies is not only timely; it is essential. Today's organizations increasingly rely on leaders who can effectively combine technical expertise with business acumen, guiding data-driven decision-making, digital transformation, and technology-enabled operational excellence. The proposed degree directly addresses this growing demand by building a holistic foundation that enables graduates to navigate both the technical and strategic dimensions of modern enterprises.

The curriculum design thoughtfully balances rigorous engineering coursework with key business foundations across operations, analytics, finance, marketing, and strategy. The integration of work experience and work projects will aid the students in building a durable, dynamic skillset. The degree mirrors the interdisciplinary vision that has driven previous successful collaborations between the College of Engineering and the Fisher College of Business, which have served as national models for integrated education.

We are fully committed to supporting this new degree through access to relevant coursework, experiential learning opportunities, supportive advising structures, industry relationships, and faculty expertise. We will partner closely with the College of Engineering and the Center for Software Innovation to deliver a deeply integrated and world-class student experience. Our faculty have long collaborated with engineering colleagues through centers, corporate partnerships, and are eager to contribute to the launch and growth of this important academic offering.

We believe the B.S. in Computer Science and Business will attract ambitious students, strengthen The Ohio State's leadership at the intersection of technology and business, and further enhance the university's contributions to the region's rapidly expanding innovation ecosystem. The Fisher College of Business is proud to endorse this proposal and looks forward to serving as the college that will confer the degree.

Thank you for your consideration of this important initiative.

Sincerely,

Aravind Chandrasekaran
Interim Dean
John W. Berry, Sr. Chair in Business

THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

College of Engineering
Department of Computer Science and Engineering
395 Dreese Lab
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614-292-5813 Phone
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March 11, 2026

Attn: Vice Provost W. Randy Smith
Council on Academic Affairs
Office of Academic Affairs
University Square South Suite 400
15 E. 15th Ave
Columbus, OH 43201

Dear Vice Provost Smith and Members of the Council on Academic Affairs:

I am writing to express my strong support for the proposal to establish a new Bachelor of Science in Computer Science and Business at The Ohio State University. As Chair of the Department of Computer Science and Engineering, I believe this degree represents a timely and strategically important addition to our academic offerings, one that responds directly to the evolving needs of industry. Further it will serve as a leading example of interdisciplinary education and collaboration as well as a model for how the influence of computing spans across industries.

The intersection of computer science with business strategy, operations, and innovation has become a defining characteristic of the needs of the evolving workforce. Increasingly, it is imperative in the workforce for those building and inside companies, particularly technology centric organizations, to know both how the product is built as well as how the business is run. This new degree is specifically designed to address these needs.

Through a thoughtfully built blended core across business and computer science, students will emerge with the ability not only to build digital products and systems, but also to understand their business context, evaluate tradeoffs, and lead interdisciplinary teams. The program will incorporate types of experiential and industry-engaged learning opportunities that our department and college have long supported.

We are especially excited to support the innovative part-time concurrent co-op model. The model allows us to intentionally blend skill building and work experience into an integrated learning journey while still supporting a target of students graduating within four years.

The degree builds upon existing collaborations between the College of Engineering and the Fisher College of Business, including interdisciplinary centers and industry partnerships that have already demonstrated success. Our faculty are eager to help support this program through course offerings, mentorship, experiential learning, and capstone design opportunities. We are confident that the program will attract highly motivated students and position them for impactful careers in Ohio's rapidly expanding innovation ecosystem.

The Department of Computer Science and Engineering fully endorses this proposal and looks forward to working closely with Fisher College of Business to support the successful launch, growth, and long-term sustainability of this undergraduate degree.

Thank you for your consideration.

Sincerely,

Signed by:
Anish Arora
6C55350FD3584E3...

Dr. Anish Arora
Chair, Department of Computer Science and Engineering
Distinguished Professor of Computer Science and Engineering
The Ohio State University

THE OHIO STATE UNIVERSITY FISHER COLLEGE OF BUSINESS

March 11, 2026

Council on Academic Affairs
Office of Academic Affairs
University Square South Suite 400
15 E. 15th Ave
Columbus, OH 43201

Dear Vice Provost Smith and Members of the Council on Academic Affairs:

I am writing to express my support for the establishment of the proposed Bachelor of Science in Computer Science and Business. As Chair of the Department of Marketing and Logistics, I see clear value in a program that combines technical training with business knowledge, two areas that increasingly intersect in many industries. Organizations today operate in environments shaped by digital systems, automation, and data-enabled decision making. Graduates who understand both technical systems and the organizational contexts in which they operate can contribute effectively to the design, implementation, and management of these systems.

The proposed curriculum integrates foundational computer science with core business competencies, including analytics, consumer insights, and go-to-market considerations. This interdisciplinary structure should help prepare students to work productively across technical and managerial functions.

Our department has participated in the proposal's development and looks forward to continuing to collaborate with the College of Engineering, the Department of Computer Science, and the Center for Software Innovation. We anticipate contributing coursework, mentorship, and experiential learning opportunities that will support the program's implementation.

For these reasons, I support approval of the proposed degree and look forward to its development.

Sincerely,

Walter Zinn

Walter Zinn
Chairperson,
Professor of Logistics

Department of Marketing and Logistics
2100 Neil Avenue, Columbus, OH 43210-1144
Email: zinn.13@osu.edu

THE OHIO STATE UNIVERSITY

College of Arts and Sciences
Department of Design
100 Hayes Hall
108 N. Oval Mall
Columbus, OH 43210
614-292-6746
design.osu.edu

Vice Provost W. Randy Smith
Council on Academic Affairs
Office of Academic Affairs
15 E. 15th Ave Suite 400
Columbus, OH 43201

March 24, 2026

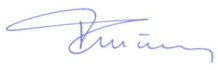
Dear Vice Provost Smith and Members of the Council on Academic Affairs:

I am writing to express my support for the proposed Bachelor of Science in Computer Science and Business at The Ohio State University. As Chair of the Department of Design, I regularly exchange with industry leaders in search of the creative talents who will shape the innovation agendas of tomorrow. I see first-hand the need for students to succeed in an increasingly interconnected and innovation-driven world and am pleased to support the advancement of this interdisciplinary program.

The intersection of design, technology, and business has become central to the development of meaningful systems, products, and services. At inception of the program, our department looks forward to offering DSN 5505: Information Design as part of a required major coursework in this degree. This course will equip students with the competencies to access, understand, and visualize data to interdisciplinary audiences in support of decision-making. Further, the Department of Design looks forward to deepening the collaboration on this degree: user-centered approaches, co-design, and problem framing are critical skills to equip future leaders in technology and technology related roles. There are numerous opportunities for expanded collaboration, including courses, capstone projects, project-based learning, co-taught experiences, and more.

The Department of Design supports the launch of this program and will welcome continued exploration on how design courses can have an even more integrated role in this important initiative.

Sincerely,



Dr. Fabienne Munch
Chair, Department of Design
The Ohio State University

THE OHIO STATE UNIVERSITY

College of Engineering

Undergraduate Education & Student Services

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To: Randy Smith, Vice Provost for Academic Programs, Office of Academic Affairs
From: Cory Matyas, Assistant Dean for Curriculum and Assessment
Date: March 25, 2026
Re: Engineering Support for BS in Computer Science and Business

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On behalf of the College of Engineering, I write to express our support for the proposal to establish the Bachelor of Science in Computer Science and Business, to be conferred by the Fisher College of Business.

The Engineering College Committee on Academic Affairs reviewed the proposal at its March 25, 2026 meeting. Committee members raised no concerns with the academic structure, interdisciplinary design, or implementation plan. Members were appreciative of the thoughtful collaboration between colleges and viewed the program as a strong addition to Ohio State's undergraduate portfolio.

The College of Engineering fully endorses this endeavor. The proposal reflects a clear and growing need for graduates prepared to work at the intersection of computing, product development, and business strategy. The integrated curriculum, experiential components, and concurrent co-op model align well with our college's commitment to rigorous, practice-oriented engineering education. We look forward to continued partnership with Fisher and the Center for Software Innovation in delivering this interdisciplinary program.