BOARD APPROVED October 10, 2025 Cindy Ream Corporate Secretary

# PURDUE UNIVERSITY BOARD OF TRUSTEES EXECUTIVE SUMMARY DEGREE PROPOSAL TEMPLATE

PLEASE NOTE THAT THE FULL ACADEMIC DEGREE PROGRAM SUBMISSION DOCUMENT WILL NEED TO BE COMPLETED FOR THE INDIANA COMMISSION ON HIGHER EDUCATION (see <a href="https://www.in.gov/che/academic-affairs/academic-degree-programs/">https://www.in.gov/che/academic-affairs/academic-degree-programs/</a>). Both this template and the Academic Degree Program Submission are submitted to the Purdue Board of Trustees. When this form is complete, please save and return to <a href="mailto:sdunk@purdue.edu">sdunk@purdue.edu</a> with tables as separate attachment.

**DATE:** August 28, 2025 **TO**: Board of Trustees

FROM: Sorin Matei, <a href="mailto:smatei@purdue.edu">smatei@purdue.edu</a>

CC: Chris Beck, <u>beck135@purdue.edu</u>; Bryan DeWitt, <u>bdewitt@purdue.edu</u>

**SUBJECT**: MS Strategy in Security and Defense Technologies

**CAMPUS OFFERING DEGREE**: Purdue West Lafayette

**ANTICIPATED START DATE:** Summer 2026

### 1. IS THE DEGREE RESIDENTIAL, HYBRID, OR ONLINE? Online

IF ONLINE, RATIONALE FOR GOING THROUGH SPECIFIC PURDUE CAMPUS—PWL, PFW, PNW, PG

The degree will be primarily developed by faculty members at the Purdue West Lafayette campus.

### 2. BRIEF OVERVIEW OF DEGREE/WHY IS THE DEGREE NEEDED?

Purdue University's online Master of Science in Strategy in Security and Defense Technologies is designed for currently serving military personnel in, representing Active Duty, National Guard, Reserves, and Coast Guard, Department of Defense civilians and defense contractors seeking advancement and upskilling in strategic and technological domains. This interdisciplinary program is supported by the FORCES (Strategy, Security, and Social Systems) initiative at Purdue, bringing together military studies, strategy, technology, and social systems to prepare defense leaders for today's rapidly evolving challenges.

Students will be empowered to analyze, design, communicate and implement defense strategies that leverage emerging technologies across domains—land, maritime, air, space and cyberspace. Learners will build fluency in systems thinking, strategic foresight, AI and data literacy, and ethical decision-making, grounded in strategy, history, policy, technology, and the social sciences. By equipping leaders with the tools to navigate complex challenges and anticipate future risk, this degree strengthens national resilience and contributes to a safer, more stable world.

The program is designed to serve two problems: equipping the next generation of military and civilian leaders with the interdisciplinary skillset and strategic mindset to effectively leverage defense technologies to address authentic global challenges and provide military and civilian leaders with an affordable Master's degree for advanced career potential. Approximately 17% of veterans have earned a Bachelor's degree and many advanced military and civilian positions require advanced training. There are approximately 2.4M uniformed military personnel.

### 3. BRIEF EVIDENCE OF FEDERAL, STATE, AND REGIONAL LABOR MARKET NEED

There were 631,021 unique job postings in fields related to strategic intelligence, military technology and leadership, national security, and homeland security between October 2019 and August 2022 (Lightcast, 2025). The top companies hiring for positions include the US Military (military and civilian employees), Northrop Grumman, Deloitte, Raytheon Technologies, and many other mid-size or smaller companies. The main target audience is current military and defense contractors who need a Master's degree for promotion and career advancement; however, we also believe that civilian government employees and will be interested in the degree program. According to the <a href="Postsecondary National Policy Institute (2025)">Postsecondary National Policy Institute (2025)</a>, approximately 17% of veterans have earned a Bachelor's degree.

### 4. COSTS

- A. Tuition and Fees—In-state and out-of-state
  - a. Military Rate: \$250/Credit Hour (70%)
  - b. Civilian Rate In-State: \$633/Credit Hour (15%)
  - c. Retail Rate Out-of-State: \$633/Credit Hour (15%)
- B. Financial Projection Table <a href="https://www.purdue.edu/provost/policies/iche.html">https://www.purdue.edu/provost/policies/iche.html</a> (Tab 1)
- C. Program Review and Expenditure Summary <a href="https://www.purdue.edu/provost/policies/iche.html">https://www.purdue.edu/provost/policies/iche.html</a> (Tab 2)
- D. Enrollment Projection <a href="https://www.purdue.edu/provost/policies/iche.html">https://www.purdue.edu/provost/policies/iche.html</a> (Tab 3)

## 5. LIST OF SIMILAR DEGREES IN THE PURDUE SYSTEM AND DISTINCTIVE ELEMENTS FOR THIS DEGREE

- Graduate Certificate in Strategic Defense Technologies at Purdue West Lafayette
  - The 9-credit hour Graduate Certificate incorporates the same core classes as the new MS degree. It is also incorporated as part of the online MS(E) Interdisciplinary Engineering program as elective coursework.
- MS(E) in Interdisciplinary Engineering, Major in <u>Strategy Defense Engineering</u> at Purdue West Lafayette
  - This major is designed exclusively for defense contractors and the curriculum is comprised exclusively of engineering courses.

### 6. COMPETITIVE DEGREES - BRIEF SUMMARY

This interdisciplinary degree will be unique in the market; however, there are competitor programs in homeland security.

- o Kennesaw State University: Certificate in Intelligence and Homeland Security
  - Focus areas: international politics, crisis management
- o American University: MS in Counter-Terrorism and Homeland Security
  - Focus areas: national security law and policy, counterterrorism, cybersecurity, and the causes of political violence
- Penn State World Campus: MS Homeland Security
  - Focus areas: policy, national strategy and security, homeland security strategy
- Liberty University: MS National Security
  - Focus areas: emergency management, border security, terror groups, and cyber warfare
- Arizona State University: MA Emergency Management and Homeland Security
  - Focus areas: biosecurity and threat management, community resilience, cybersecurity policy and management, emergency management, and homeland security
- Naval Post Graduate School: MA Homeland Security
  - Focus areas: policy, intelligence, communication, and leadership
- Georgetown: MS Security Studies
  - Focus areas: area security, economics and security, and technology and security

Recommended Approval:	
Patrick J Wolfe, Ph.D. Provost	09/11/2025 Date
Approved:	
Mung Chiang, Ph.D. President	Date

Roscoe H. George Distinguished Professor of Electrical and Computer Engineering

### **Program Financial Projection**

Self-Supported Professional Graduate Programs (SSPGP)

### Program name: MS Strategy in Security and Defense Technologies

### Cost of Program Calculation (Market Rate)(1)

Total Program Enrollment (cap)>>>	250		Residency %	Rate per CH <sup>(1)</sup>	
Blended Tuition	\$10,950	Resident	15%	\$633	
Program Credit hours	30	Non-Resident	15%	\$633	
Program Credit hours per year	18	Military-Affiliated	70%	\$250	
		Blended Rate >>>	>	\$365	

Program Incremental Revenues					
	Year #1	Year #2	Year #3	Year #4	Year #5
	FY 2026				
1. Enrollment/Revenue Projection	(Fall 2025)	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Cohort- <b>New</b> Students <sup>(2)</sup>	15	60	75	95	115
Second Year Cohort	-	15	60	75	95
Total Enrollment Count	15	75	135	170	210
Total Incremental Revenue	\$ 32,850	\$ 394,199	\$ 733,648	\$ 919,797	\$ 1,149,747

Program Expenditures											
			Year #1		Year #2		Year #3		Year #4		Year #5
		FY 20	26(Fall 2025)		FY 2027		FY 2028		FY 2029		FY 2030
1. Salary and Wages	FTE		Cost	FTE	Cost	<u>FTE</u>	Cost	FTE	Cost	<u>FTE</u>	Cost
a. Faculty	0.00	\$	1,920	0.00	\$ 23,043	0.00	\$ 42,885	0.00	\$ 53,767	0.00	\$ 67,208
b. Limited Term Lecturers	0.00	\$	-	0.00	\$ -	0.00	\$ -	0.00	\$ -	0.00	\$ -
c. Graduate Students	0.75	\$	51,000	0.75	\$ 51,000	0.75	\$ 51,000	0.75	\$ 51,000	0.75	\$ 51,000
d. Academic Program Manager	1.00	\$	85,800	1.00	\$ 88,374	1.00	\$ 91,025	1.00	\$ 93,756	1.00	\$ 96,567
Total S&W	1.75	\$	138,720	1.75	\$ 162,417	1.75	\$ 184,910	1.75	\$ 198,523	1.75	\$ 214,775
2. Fringes and Fee Remissions											
a. Fringe Benefits		\$	-		\$ -		\$ -		\$ -		\$ -
b. Fee Remissions		\$	-		\$ -		\$ -		\$ -		\$ -
Total FB & FR		\$	-		\$ -		\$ -		\$ -		\$ -

### 3. Supplies and Expenses

a. General Supplies & Expenses	\$	-	\$ -	\$	-	\$	-	\$	-
b. Course Production	\$	38,500	\$ 35,586	\$	36,654	\$	37,754	\$	38,886
c. Recruiting, Marketing, & Admissions d. Travel & Entertainment	\$	119,335	\$ 140,440	\$	145,513	\$	151,186	\$ \$	156,902
u. Havet & Entertainment	Ф	40,000	\$ 40,000	Ф	40,000	Ф	40,000	Ф	40,000
e. Student Support	\$	12,188	\$ 32,245	\$	44,496	\$	51,355	\$	59,727
f. Space Rental (Indianapolis only)	\$	-	\$ -	\$	-	\$	-	\$	-
Total S&E	\$	210,023	\$ 248,271	\$	266,663	\$	280,295	\$	295,515
4. Fees									
a. University Fees	\$	4,358	\$ 52,293	\$	97,324	\$	122,018	\$	152,523
b. Purdue University Online Fees	\$	4,500	\$ 54,000	\$	100,500	\$	126,000	\$	157,500
Total Fees	\$	8,858	\$ 106,293	\$	197,824	\$	248,018	\$	310,023
Total Expenditures	\$	357,601	\$ 516,981	\$	649,397	\$	726,836	 \$	820,313

Projected Program Surplus/(Deficit)*	-\$324,751	-\$122,782	\$84,251	\$192,961	\$329,434
Cumulative Program Surplus/(Deficit) in College	-\$324,751	-\$447,533	-\$363,282	-\$170,321	\$159,113

### Notes

- (1) Market Rate analysis can be done per each program through the iData office. If additional assistance is needed, please work through your Business Office to complete the market rate analysis. See Appendix A for minimum's.
- (2) New Students represents the anticipated number of *new* students to campus; transfers or existing students are *not* to be included. The Total is set equal to the 'New-to-Campus FTEs' completed in the Enrollment section (I2d).

The following tabs are additional resources.

- Average Salaries is based on Spring 2025 data. This is a resource for calculating Salary costs into the financial tables.
- Table 2 Rev & Exp Summary is required for submission into curriculog. It must align with the amounts listed in the financial summaries.
- Table 3 Enrollment projection is required for submission into curriculog. It must align with headcount enrollment projections listed in the financial summaries.

<b>Business Area Display</b>	(All)	<< Select Business Area
Financial Unit Display	(All)	

			Average of Annual Base Salary 100
Employee Class2	Career Stream Code	Sum of FTE	Pct Full Time
Faculty		1,895.59	154,202
Clinical/Research		517.57	115,949
Limited Term Lecturer		154.32	54,034
Visiting Faculty		79.19	78,978
Continuing Lecturer		314.40	78,128
Post Doc/Intern/Res		628.00	52,221
Exec/Mgmt/Prof		5,115.01	86,514
Support		1,014.50	43,853
Service		1,845.83	45,224
Grand Total		11,564.41	87,482

inancial Unit Display			
11000000 - Ag - Admin	11000600 - CES	11010000 - Agricultural Co	11030000 - Ag Econ
11040000 - Ag & Biological	11050000 - Agronomy	11060000 - Animal Sciences	11070000 - Biochemistry
11080000 - Indiana State	11090000 - Botany & Plant	11100000 - Field Extension	11110000 - Forestry & Nat
11120000 - Food Science	11130000 - Ag Sciences E	11140000 - Horticulture	11150000 - International P
11160000 - CERIS	11170000 - Purdue Ag Ce	11180000 - Entomology	12000000 - Vet Med - Admin
12010000 - Comparative P	12020000 - Center for Par	12030000 - Basic Medical	12040000 - Vet Clinical Sci
12050000 - Vet Teaching	12060000 - Medical Educa	12070000 - Center for Co	12080000 - ADDL
13000000 - HHS Admin	13000700 - Public Health	13020000 - Nutrition Science	13030000 - Human Develo
13040000 - Hospitality & T	13050000 - Health & Kines	13060000 - Health Sciences	13070000 - Nursing
13080000 - Psychological	13090000 - SLHS	14010000 - College of Eng	14030000 - Aero & Astro
14040000 - Chemical Engi	14050000 - Civil and Const	14060000 - Electrical & Co	14070000 - Engineering E

# Table 2 Program Revenue and Expenditure Summary Board of Trustees Table

**Purdue West Lafayette Campus** 

**Graduate - SSPGP** 

**Program name: MS Strategy in Security and Defense Technologies** 

	Year #1 FY 2026		Year #2 FY 2027		Year #3 FY 2028		Year #4 FY 2029		Year #5 FY 2030
Total Incremental Revenue*	\$ 32,850	\$	394,199	\$	733,648	\$	919,797	\$	1,149,747
Total Expenditures	\$ 357,601	\$	516,981	\$	649,397	\$	726,836	\$	820,313
Projected Program Surplus/(Deficit)**	\$ (324,751)	\$	(122,782)	\$	84,251	\$	192,961	\$	329,434

### **Additional Departmental Footnotes:**

<sup>\*</sup>Based on the anticipated number of *new* students to campus; transfers or existing students are not included. Projected incremental revenue is based on the current *full-time* tuition and fees approved by the Bursar.

<sup>\*\*</sup>Projected surplus/deficit is an aid to identify potential new University revenue, anticipated program costs, and degree substantiality. This does not represent any type of funding request.

# Table 3 Projected Headcount and FTE Enrollment and Degrees Conferred Board of Trustees & ICHE Table

Purdue West Lafayette Campus

Graduate

Master Degree

MS Strategy in Security and Defense Technologies

	Year #1 FY 2026	Year # 2 FY 2027	Year # 3 FY 2028	Year # 4 FY 2029	Year # 5 FY 2030	Year # 6 FY 2031	Year # 7 FY 2032	Year # 8 FY 2033
Part-Time	15	60	75	95	115	135	145	150
Full-Time Enrollment Projections (Headcount)	0 15	<u>0</u>	75	95	0 115	0 135	0 145	0 150
Part-Time	0	0	0	0	0	0	0	0
Full-Time	9	36	45	57	69	81	87	90
Enrollment Projections (FTE)	9	36	45	57	69	81	87	90
Degree Completions Projection	0	12	48	60	76	92	108	116
						ТІ	nree-Year Averag 105	e

Projected Completion Rate:80%

CIP Code: 43.0301

### **Indiana Commission for Higher Education**

New Degree Program Proposal for Public Institutions

# M.S. Strategy in Security and Defense Technologies To Be Offered by Purdue University at West Lafayette

Р	Program Details						
Degree Award Level:	Master's						
<b>Mode of Delivery</b> (On-Campus Only, Online Only, or Blended ):	Online Only						
Nature of Distance Education (100% Online, Blended, or None):	100% Distance						
Academic Unit(s) Offering Program: College, School, Department(s):	Interdisciplinary Program housed within the Office of the Vice Provost for Graduate Students and Post-Doctoral Scholars. Content Primarily comes from the College of Liberal Arts, Brian Lamb School of Communication						
Credit Hours:	30						
Suggested CIP Code:	43.0301						



1.	Program Description & Developmental Timeline	3
2.	Rationale for the Program	4
3.	Career Relevance and Evidence of Market/Societal Need	7
4.	Evidence of Positive Student Outcomes: Job Placement, Wages, and Student Debt	.11
5.	Market Intelligence: Student Demand, Provider Competition, and Projected Enrollment	.17
6.	Program of Study: Curriculum, Quality, and High-Impact Practices	.22
7.	Programmatic Costs	.32
8.	External Letters of Support (Minimum of 5)	.34

### 1. Program Description & Developmental Timeline

### a. Program Description

• Provide a short, comprehensive description of the proposed degree program that would be available to prospective students and other interested stakeholders. This description, or a slightly altered version, would be included on the institution's web site upon launch and relevant promotional materials.

Purdue University's online Master of Science in Strategy in Security and Defense Technologies is designed for currently serving military personnel in, representing Active Duty, National Guard, Reserves, and Coast Guard, Department of Defense civilians and defense contractors seeking advancement and upskilling in strategic and technological domains. This interdisciplinary program is supported by the FORCES (Strategy, Security, and Social Systems) initiative at Purdue, bringing together military studies, strategy, technology, and social systems to prepare defense leaders for today's rapidly evolving challenges.

Students will be empowered to analyze, design, communicate and implement defense strategies that leverage emerging technologies across domains—land, maritime, air, space and cyberspace. Learners will build fluency in systems thinking, strategic foresight, AI and data literacy, and ethical decision-making, grounded in strategy, history, policy, technology, and the social sciences. By equipping leaders with the tools to navigate complex challenges and anticipate future risk, this degree strengthens national resilience and contributes to a safer, more stable world.

### b. **Development Timeline**

Provide a timeline of key milestones in the development of this proposal and its progress through the
institutional approval process before submission to the Commission, e.g., discussions at the
department level, employer/industry engagement, discussions with non-HLC programmatic
accreditors, examination of program exemplars, campus curriculum committee approvals, and Board
of Trustees approval. Briefly explain any notable delays or pauses in the degree program's
development.

Date	Key Milestone
05/13/24	Student Start of the Strategic Defense Technologies Concentration within the M.S./M.S.E.
	Interdisciplinary Engineering Program (12 credit hours)
01/13/25	Student Start of the Graduate Certificate: Strategic Defense Technologies
01/19/25	Initial Outline of the New Degree Timeline and Market Feasibility
02/04/25	Program Planning Meeting with Purdue University Military Advisory Board
02/19/25	Finalization of the Financial Feasibility Model for the Program
03/21/25	Academic Proposal Submission into Curriculog, the University's Proposal Management Software
04/02/25	First Reading by the Purdue University Administrative Review Committee
04/09/25	Approval by the Purdue University Administrative Review Committee
04/15/25	Approval by the Director of Graduate Studies with the Office of the Vice Provost for Graduate
	Students and Post-Doctoral Scholars (OGSPS)
04/22/25	Approval by the Vice Provost for Graduate Students and Post-Doctoral Scholars
05/08/25	Approval by the Purdue University Graduate Council
07/01/25	Proposal Delayed due to Changes within ICHE's New Degree Proposal Template. The program will not
	be considered at the 08/08/25 Board of Trustees Meeting as the Document Deadline was 06/27/25.
	Revisions to the proposal could not be retroactively completed.
08/29/25	Approval by the Purdue University Provost's Office
10/08/25	Approval by the Purdue University Board of Trustees

### 2. Rationale for the Program

### a. Rationale: General

- What problem is this proposed degree program trying to solve? The rationale must make a compelling, thorough justification why establishing a new program of study is responsive to current and future talent needs.
  - The program is designed to serve two problems: equipping the next generation of military and civilian leaders with the interdisciplinary skillset and strategic mindset to effectively leverage defense technologies to address authentic global challenges and provide military and civilian leaders with an affordable Master's degree for advanced career potential. Approximately <a href="17">17%</a> of veterans have earned a Bachelor's degree and many advanced military and civilian positions require advanced training. There are approximately 2.4M uniformed military personnel.
  - On The new degree program incorporated feedback from Purdue University's Military Advisory Board. As the timeline demonstrates, the initial new courses launched as both a concentration as part of Purdue University's large M.S./M.S.E. in Interdisciplinary Engineering in May 2024 and as a Graduate Certificate in January 2025. Conversations with the Military Advisory Board and existing relationship with military partners led us to the conclusion that a new degree program was needed to provide military personnel with an opportunity to upskill and earn promotion opportunities. The interdisciplinary degree program combines courses from the Colleges of Liberal Arts, Engineering, and the Polytechnic Institute. By creating a new interdisciplinary program, we are able to create a unique, market-driven program to meet the needs of our target learners that strategically incorporates courses from across campus. The interdisciplinary program provides flexibility with respect to curriculum design and allows us to expand the program by creating new majors and concentrations in the future to further tailor the program to meet the needs of learners and respond to changing market needs.

### b. Institutional Rationale: Mission and Strategic Alignment

• Categorize this proposed degree program as one of the following:

Mission Critical	$\boxtimes$
Mission Aligned	
Discretionary	

- If the proposed degree program is Misson Critical or Mission Aligned, explain how the program will harness and complement institutional strengths? How is it consistent with the mission of the institution and the institution's strategic plan to wisely allocate limited resources to maximum effect? (Provide a link to the strategic plan and refer to the relevant section(s).)
  - Purdue University is committed to meeting the needs of military-affiliated students and providing learning opportunities that align with the personal and professional goals of military-affiliated personnel, including defense contractors. A <u>July 9, 2025 press release</u> highlighted that Purdue was recognized with the Tier 1 Collegiate Purple Star of Indiana Award, Indiana's highest form of achievement. The M.S. in Strategy and Strategic Defense Technologies further fulfills this commitment by offering the State of Indiana's first graduate program priced at the tuition assistance rate.
  - The MS in Strategy in Security and Defense Technologies aligns with several missions of the institution. The <u>FORCES</u> initiative, created in collaboration with <u>Discovery Park</u> (a research hub of

- the University) as a part of the Universities National Security and Defense Council "promotes research and instruction to improve decision-making in present and future global leaders."
- Purdue@DC is a strategic University initiative that "serves our nation by bringing to the capital unique strengths in tech diplomacy, national security...and excellence at scale." This program aligns closely with the Purdue@DC initiative by incorporating robust strategy coursework, national security, in a unique program that is tailored to military and civilian students at a price that encourages excellence at scale.
- Purdue aspires to increase its national recognition as a leader in supporting Veteran and Military Family students through the <u>Veteran and Military Success Center</u>, which supports active duty and military veterans by assisting them throughout their program of study at the University.
- If the proposed degree program is Discretionary, provide a compelling rationale to expand the scope of the institution that would add rather than detract (or distract) from other academic programming and the institution's strategic plan to wisely allocate limited resources to maximum effect. (Provide a link to the strategic plan and refer to the relevant section(s).)
  - Does not apply

### c. State Rationale: Postsecondary Educational Attainment

- Briefly explain how the proposed degree program will address the State of Indiana's talent priorities as reflected in the Commission's most recent strategic plan, the <u>HOPE (Hoosier Opportunities & Possibilities through Education) Agenda?</u>
  - The MS in Security and Defense Technology Strategy addresses several priorities outlined in the HOPE Agenda:
    - Indiana aspires to be a top 10 state for providing "postsecondary attainment for veterans." The affordable tuition of this program means that military students will not have any out-of-pocket tuition expenses for the program, making the program unique in the graduate market. The University is well poised to support the unique needs of military learners through partnership with the Veteran and Military Success Center as well as dedicated success coaches who will work with students throughout their study to assist them with critical skills such as time management, work-life balance, communication, organization, stress management, and collaboration. Our student support structures will maintain a high rate at which students will successfully complete the program.
    - Leveraging prior learning through articulation agreements with military providers. Examples of military articulation agreements for online programs include the <u>Naval Test Pilot School</u> and the <u>Air Force Research Laboratory</u>. We will work with students to review prior learning and, when faculty determine that academic credit may be earned, learners may articulate as many as 12 credit hours into the degree program.
    - The affordable price of the program aligns closely with Indiana's mission to increase education going rates for youth and adults by through low tuition and fees and a continuous focus on high quality.
  - With respect to the Economic and Social Mobility Initiative:
    - The affordable price of the degree means that military students will graduate the program without tuition debt and civilian students will have minimal debt for their Master's degree.
    - Advanced degrees are required for multiple civilian and military professional roles, especially officer positions. Such promotions are generally associated with increased wages, ranging from <u>20-50%</u>.
    - The median wage for individuals with a Master's related to Homeland Security is \$90k per year with the field expected to grow by 5.9% between 2023-2027 (Lightcast, 2025).

che.IN.gov

The <u>median household income in Indiana</u> is \$69,477, indicating significant economic and social mobility and prosperity outcome potential for individuals with a Master's in Security and Defense Technology Strategy.

### d. National Rationale: Economic Competitiveness, National Security, and/or National Interest

- Briefly explain how this proposed degree program will help advance national economic competitiveness, national security, and/or a key national interest.
  - National Security is a key highlight of the program, which is primarily designed for military-affiliated learners and defense contractors. The M.S. Security in Strategy and Defense Technologies incorporates a systems approach to defense technologies in multiple domains (air, sea, space, cyberspace, and land). A 2024 Letter by the U.S. Department of Commerce highlighted the importance of technologies, referencing the CHIPS and Science Act, in advancing national security. Our interdisciplinary program allows learners to create a customizable plan of study relating to their personal and career goals, advancing national security interests from both technical and policy domains. That is, learners may create a plan of study that is more focused on technical skills, policy, strategy, and/or a combination. This approach allows us to meet the needs of an evolving, competitive defense market.

### 3. Career Relevance and Evidence of Market/Societal Need

### a. External Input on Program Design.

- Elaborating on the information provided in the degree program's developmental timeline under (1.b.), briefly describe external input on program design. Potential examples include employer advisory boards or surveys, industry forums, evolving trends in the academic/disciplinary field, and accreditation/licensure standards. Clarify if this is an outgrowth of a current certificate, minor, and/or degree's concentration/track. (Link to any relevant entities.)
  - The courses of the program were initially created as both a <u>professional development (non-credit)</u> series of courses as well as a <u>Strategy and Defense Engineering Concentration</u> within the M.S./M.S.E. Interdisciplinary Program, which launched to students in 2024.
  - The program then launched as a <u>Graduate Certificate in Strategic Defense Technologies</u> in Spring,
     2025.
  - In February 2025, Purdue's Military Advisory Board convened for a special meeting about this program. The advisory board reviewed the initial courses and provided feedback to shape the Master's degree, leveraging their military backgrounds to help the academic committee finalize the academic proposal to better meet the needs of military-affiliated learners. The one-day think tank, which included the Advisory Board and the program faculty, considered the learning outcomes, courses, program pricing, and the student acquisition approach for the new program. One specific outcome of the Advisory Board meeting was a connection with Navy Foreign Area Officers (FAOs), a potential academic-to-military partnership. Conversations with FAOs are early, but we are in discussions with a military partner about customizing the core content to best meet their needs and creating a pipeline of FAOs for the program. Ongoing exploration with various other warfighting communities are ongoing.

### b. Program Learning Outcomes: Competencies, Skills, Knowledge, and Experiences

- List the significant learning outcomes that students completing this degree program are expected to
  master, which would be public. If applicable, specify usage of any non-HLC programmatic accreditation
  standards, industry qualification frameworks, or certification/licensure standards. (Link to any specified
  standards.)
  - o This program does not lead to licensure. The program's primary learning outcomes include:
  - 1. Train defense leaders to strategically analyze, understand, shape, communicate about, and effectively apply defense technology strategies.
  - 2. Synthesize Defense Technologies Strategy in multiple domains (land, maritime, air, space, and cyberspace) from a policy, technology and social sciences perspective in a systems thinking manner.
  - 3. Develop students' competencies in strategic thinking on systems and defense technology; critical analysis of situations using data; and ethical problem solving in the domains of strategic security, national defense, homeland security, and international humanitarian efforts.

### c. Indiana-Specific Talent Needs: Strategic Plans, Studies, and Reports

- Explain how this proposed degree program would help address Indiana's talent priorities as reflected in
  the most recent strategic plans, studies, and/or reports of relevant local, regional, or state authoritative
  entities, such as regional workforce boards, the Bowen Center for Health Workforce Research and
  Policy, the Indiana Economic Development Corporation, the Indiana Early Learning Advisory Committee,
  the Indiana Health Workforce Council, the Indiana Institute for Workforce Excellence, Ascend Indiana,
  AgriNovus Indiana, BioCrossroads, Conexus Indiana, and TechPoint. (Link to cited sources.)
  - The <u>Indiana Economic Development Corporation</u> provided several relevant data points related to Defense (figure below).



- Indiana has several military installations, as well a #1 ranking in pass-through highways. One-in-five residents work in advanced manufacturing. Purdue is also the home of the <u>nation's only warfare entity</u> with "higher education and research entities."
- O Despite the manufacturing and infrastructure opportunities, Indiana currently lags behind other states for positions related to homeland security. There were 9,012 jobs in 2023, 38% below the national average (Lightcast, 2025). Indiana is expected to outpace national growth between 2023-2027; Indiana's homeland security positions are expected to grow by 8.1% compared with 5.9% nationally. Annual earnings in Indiana are \$73.9k, below the \$90k national average. The largest employers in Indiana for related positions are universities (Indiana University, Notre Dame, and Purdue, Elevance Health, Eli Lilli, Humana, the State of Indiana, Rolls Royce, and Bausch Health).
- o <u>The Indiana Intelligence Center</u>, an initiative of the Indiana National Guard, is one of the "top intelligence training sites for the US Army."
- A 2019 Annual Report indicated that there are approximately 14,000 National Guard soldiers in the State
  of Indiana.
- <u>L3Harris</u> recently completed a \$125M expansion at its space manufacturing site in Fort Wayne, Indiana, increasing the presence of defense industrial bases in the State.
- Summarize any additional regional, state, or national studies that address current and future talent needs served by this proposed degree program. (Link to cited sources.)
  - There were 827,138 jobs related to homeland security in the United States in 2023 and the national market is expected to grow by 5.9% between 2023-2027. There are approximately 75,000 annual openings and the median salary is \$90k. (Lightcast, 2025).
  - There were 341,532 unique job postings in the two-year period between September 2021-September 2023; 32,603 employers are competing for talent.
  - Approximately <u>17% of US Military</u> personnel have a Bachelor's degree and may wish to upskill for a graduate degree. Many advanced military and civilian positions require a Master's degree.

### d. Identify the Most Relevant Occupations and Industries

- Specify the specific occupations, general occupational classifications, and industry sectors that are the
  most relevant to the proposed degree program in terms of competencies, knowledge, skills, and
  experiences, including any accreditation/licensure standards, if applicable, acknowledging not all
  postsecondary degrees are direct preparation for a narrow list of occupations or industries.
  - Cite authoritative sources that connect learning outcomes with employment opportunities, such as the Classification of Instructional Program (CIP) Standard Occupational Code (SOC) mapping of the U.S Department of Labor's (USDOL) Occupational Information Network (O\*NET), the Bureau of Labor Statistic's (BLS) Occupational Outlook Handbook, the State of Indiana's 'Credentials of Value List,' the graduate to industry sector employment flows of similar

programs of study (4-digit CIP Code Level) from the <u>U.S. Census Bureau's Post-Secondary Employment Outcomes (PSEO)</u> data, or proprietary CIP-SOC tools, e.g., Lightcast and Gray DI.

Summarize the most prevalent job titles as well as credentials, knowledge, skills, and competencies included in recent regional/Indiana job postings that are most relevant to the proposed degree program. The proposal must demonstrate employers are regularly searching for graduates of this proposed program.

CIP Code: 43.0301

SOC Code: 55-0000

- We expect that many of the military-affiliated students will seek promotion in the US Armed Forces.
  - There were approximately 941,527 jobs in 2023 and 2,171 postings per month (Lightcast, 2025). Military positions are expected to remain flat between 2023-2027 with a slight 0.6% decline. However, current military members would greatly benefit from this program for promotion opportunities. Texas, California, North Carolina, Virginia, and Florida are the Top 5 states for military-affiliated positions. Indiana ranked 31<sup>st</sup> with approximately 9,000 jobs.
- In the civilian market, graduates will likely work in the defense industry as contractors assuming roles related to project management, leadership/management, supervisors, security and data analysts, and in diplomacy. As of 2023, there are 827,138 relevant homeland security jobs in the United States, which are distinct from the military positions referenced above. The top posted job titles related to homeland security are:
  - Project managers/project coordinators
  - Program managers/program specialists
  - Program directors
  - Program coordinators
  - Technical program managers
  - Regulatory affairs managers/regulatory affairs specialists
- The top skills include:
  - Project management
  - Operations (process improvement, risk management, change management)
  - Business skills (finance, marketing, data analysis)
- The top companies posting, aside from the US Military, include:
  - Deloitte
  - Northrop Grumman
  - Boeing

Appendix 1: Provide the list of occupations and occupational classifications relevant to the proposed degree program. Provide analyses of the most recent regional/Indiana job posting analytics. (This appendix should contain the detailed tables and/or relevant pages from the analyses.)

### e. Occupational Outlook: Projected Employment Trends

 As required under IC 21-18-9-5(b), summarize the current and projected labor market supply and demand for the occupations, occupational classifications, and industries identified as most relevant to the proposed degree program under (3.d.). Provide evidence in regional (if available), state, and national terms. The proposal must demonstrate graduates of the proposed degree program should have promising career opportunities. In statewide and/or regional terms, are any of the most relevant occupations identified under (3.d.) listed among the top-three categories under the Indiana Department of Workforce Development's (DWD) 'Top Jobs':

Note: given the military market for this program, the positions do not align perfectly with the Indiana DWD database. We have incorporated relevant, similar roles in the table to demonstrate potential career outcomes.

5- Star 'Top Jobs'	Yes ⊠	No □		
<b>List:</b> Information Technology Project Managers, General and Operations Managers, Engineering Managers				
4-Star 'Top Jobs'	Yes ⊠	No 🗆		
List: Facilities Managers, Security Managers				
3-Star 'Top Jobs'	Yes ⊠	No □		
List: Technical Directors/Managers				

In statewide, regional, and/or national terms, are any of the most relevant occupations or occupational classifications identified under (3.d.) categorized by the USDOL's Bureau of Labor Statistics as the 'Fastest Growing (Projected)' or 'Most New Jobs/Occupations with the Most Job Growth (Projected)' or by USDOL's O\*Net as a 'Bright Outlook' occupation:



List, specifying the geography, respective designation(s), and any applicable growth rate category:

o Information Security Analysts are the only positions that are indicated on the "Fasted Growing" positions list according to the Bureau of Labor Statistics. The market is expected to grow by approximately 33% between 2023-2033 and the median wages are \$124,910.

Appendix 2: In addition to the narrative and questions above for (3.f.), provide a summary of Indiana DWD data and 'Top Jobs' occupational rankings, U.S. BLS data, O\*NET data, proprietary tools like Lightcast or Gray DI, etc. (This appendix should contain the detailed tables addressing occupation/occupational-specific details as well as applicable industry sector(s) projections on percentage growth, relative growth to average occupational growth, and the absolute employment change, upon which the narrative summary of future labor market demand is based including Indiana-specific information and/or relevant pages from the analyses.)

# 4. Evidence of Positive Student Outcomes: Job Placement, Wages, and Student Debt

### a) Student Career Exploration and Planning

 As required under IC 21-18-9-5(b), explain how the proposed program will advise students on career exploration and planning that includes timely information about the labor market and career pathways?

### Individualized Advising and Coaching

• Graduate students have access to dedicated academic advisors and <u>success coaches</u> who provide personalized guidance throughout their program. Advisors help align students' academic goals with career objectives, while success coaches focus on broader professional development, networking, and long-term career planning. Coaches also regularly schedule events each term with industry partners and offer connections with peer support mentors when available to help a student leverage the most out of their Purdue community. Together, they assist students in identifying potential career paths, exploring industry-specific opportunities, and developing strategies to reach their goals ensuring students have necessary tools for success.

### Collaboration with Purdue's Center for Career Opportunities (CCO)

Upon University admission, program entry and onboarding, all students participate and engage with a Purdue University New Student Express onboarding course. Accessed through Brightspace, this course provides assistance at getting the best possible start of their academic pursuits by providing tools and skills needed for academic success, career support, and goal achievement. A resource for future reference section within this course provides information related to Career Development and Support, specifically the Center for Career Opportunities. Students can make appointments, explore resources, and get assistance navigating career challenges. Additionally, students partake in program specific orientation events connecting them with essential staff and faculty for degree planning and career pathway exploration. Additionally, our success coaching team regularly promotes professional development opportunities offered by the Center for Career Opportunities, and Purdue's Graduate Professional Development office to help students take full advantage of workshops that will help them advance their careers.

### Learner Experience Project Team

- Purdue University Online administers satisfaction feedback surveys throughout the lifecycle of our graduate students through our Learner Experience Project Support Team. The post-graduate survey is administered each fall and spring term during a student's graduating semester. Parts of this survey include sections focused on career outcomes (current employment status, type of employment, salary range) and CCO services utilization, which are analyzed for opportunities to enhance support and collaboration with CCO.
- Our most recent spring 2025 post-graduate survey yielded163 completed responses and also noted a positive ratings increase from 6.7% to 28.8% of our career services utilization, indicating growing awareness and evolving expectations among our students. Additionally, of 163 survey responses, 126 (77.3%) graduating students indicated they have a job secured for the upcoming year

### b) Connecting Students with Employment Opportunities

• As required under IC 21-18-9-5(b), explain how the proposed program will facilitate direct connections between students and employment opportunities?

### Networking Events with Alumni, faculty and industry professionals

 Coaching and advising teams collaborate and promote virtual alumni, faculty, and industry partner events. Additionally, student-led affinity groups are known to host events or engage with alumni, faculty and industry partners. Our coaches and advisors are also active in assisting with connecting students to faculty for the purpose of career research or to expand knowledge on the labor market and career pathways of their field.

### Military Advising and Subject Matter Experts

This program is unique in that it is specifically tailored to the military. Several of the course instructors are industry experts with military and defense experience. Additionally, military partners will work with an Executive Director who has retired from the military. Students will have regular access to both staff and faculty stakeholders who are well equipped for career advising.

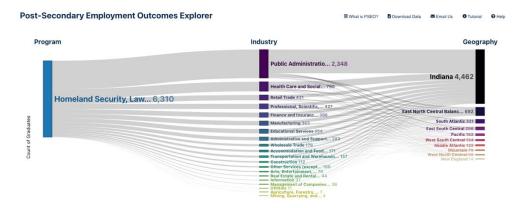
### c) Job Placement

- As required under IC 21-18-9-5(b), provide the projected job placement rate for program graduates, including the projected job placement rate related to a graduate's level of education or training, including estimates of underemployment. (Link to cited sources and authoritative proxies used as the basis for the projection, e.g., The New York Federal Reserve's <u>'Labor Market Outcomes for Recent College Graduates'</u> by major.)
  - Military and defense occupations are not included on the <u>New York Federal Reserve's Labor Market</u>
     <u>Outcomes</u> site. Related fields include:
    - Engineering Technologies: 1.9% unemployment, 40.1% underemployment
    - General Engineering: 2.4% unemployment, 28.2% underemployment
    - General Social Sciences: 3.3% unemployment, 54.1% underemployment
    - Information Systems and Management: 5.6% unemployment, 28.5% underemployment
    - Interdisciplinary Studies: 3.0% unemployment, 48.4% underemployment
    - Overall: 3.6% unemployment, 38.3% underemployment
  - The plurality of students in Purdue University's Online Programs are employed full time as they complete their program of study (IDATA, 2025).
- If the program is primarily a feeder for graduate/professional programs, please describe the programs most graduates are expected to attend. (Link to examples of relevant programs.)
  - The program is not designed to be a feeder into graduate or additional professional programs. However, Purdue University offers two online professional doctorate degrees (<a href="Doctor of Technology">Doctor of Technology</a> and <a href="Doctor of Engineering">Doctor of Engineering</a>) that may be of interest to qualified program graduates. Students would be able to articulate up to 30 credit hours from the MS in Strategy and Strategic Defense Technologies into either of these programs pending faculty review of transcripts.

### d) Graduate Retention

- In reference to facilitating direct connections between students and employers under (4.b.) and the regional/state workforce demand data under (3.e.), describe how this program will improve the institution's in-state graduate retention rate.
  - Because the U.S. military places personnel across the country, it is not possible to state that the program will increase the Indiana retention rate for individuals who remain in military-affiliated positions.
  - o Indiana is a state with military-affiliated opportunities as articulated in the research presented in the proposal. Further, Indiana may attract program graduates once they retire from the military and who seek civilian careers. The interdisciplinary program will equip learners for roles in leadership, manufacturing (Indiana is ranked #3 in the nation), and management. The State of Indiana offers several benefits to veterans that may attract them to the State.

- Additionally, Purdue University Online Student Success Coaches are hosting a career fair in October 2025 that connects online learners with the Center for Career Opportunities to facilitate connections between learners and prospective jobs throughout Indiana and the United States.
- As required under IC 21-18-9-5(b), provide the program's projected graduate retention rate upon graduation and after five years. (Link to cited sources as a basis for the projection.)
  - Data from PSEO demonstrates that for all institutions in Indiana within the 43 CIP code, 50.8% (242/476) of graduates were within Indiana one year after graduation. At the five-year mark, that drops slightly to 49.8%. Additionally, completing an online M.S. degree is not typically a life event that triggers relocation; therefore, we expect the proportion of learners who are already located within Indiana to remain within the State.



### e) Special Fees above Baseline Tuition

- Summarize any special fees above baseline tuition that are needed to support this program.
  - o No fees are added above baseline tuition; fees are taken out of the advertised tuition rate.
  - o The pricing structure is as follows:
    - Military Rate: \$250/Credit Hour (80%)
    - Civilian Rate In-State: \$633/Credit Hour (10%)
    - Retail Rate Out-of-State: \$633/Credit Hour (10%)
  - > Fees:
    - Digital Education Fee: \$50/CR
    - Purdue University Online Infrastructure Fee: \$18.80/CR
    - Facilities and Administration: \$25.78/CR

### f) Student Return-on-Investment (ROI): Wages and Student Debt

• As required under IC 21-18-9-5(b), provide the estimated wages for graduates at the following career milestones, if available:

Caraar Staga	Estimated Annual Salary				
Career Stage	25 <sup>th</sup> Percentile	50 <sup>th</sup> Percentile	75 <sup>th</sup> Percentile		
Starting:	\$65,000	\$92,830	\$130,520		

Three years after graduation:	\$71,657	\$99,08 <i>7</i>	\$136,023
Five years after graduation:	\$77,070	\$104,495	\$141,431
10 years after graduation:	\$90,582	\$118,017	\$154,953
20 years after graduation:	\$117,626	\$145,061	\$181,997
30 years after graduation:	\$144,670	\$172,195	\$209,041

- Notes on Methodology:
  - 25th Percentile: Due to the close alignment of starting salaries with Indiana state wage data, the function used to derive these estimates is based on Indiana's wage progression model.
  - 50th Percentile: The formula used to calculate these values is: Y = \$2,704.4x + \$90,973.40, where \$90,973.40 represents 98% of the starting salary derived from EPOS data (\$63,538 is 98% of \$65,000).
  - o 75th Percentile: The formula used to calculate these values is: Y = \$2,704.4x + \$127,909.60, where \$127,909.60 represents 98% of the starting salary derived from EPOS data.
- Compare the estimated wages (above) to the most recent authoritative median wage of the region/state, living wage of the region/state (e.g., MIT Living Wage Calculator), and median wage for individuals with the same or similar postsecondary credential in the region/state (e.g., PSEO and PSEO Coalition).

**Summary**: Wages for the 25<sup>th</sup> percentile of homeland security graduates with a Master's degree are nearly identical to the Indiana median salary wages at all career milestones. We extrapolated the equation for the Indiana data to determine approximate salaries for the 50<sup>th</sup> and 75<sup>th</sup> percentile across the 30-year milestones. Program graduates with positions in the median and 75<sup>th</sup> percentile is expected to far exceed the Indiana median earnings based on PESO data (2025). Lightcast data, which provided the basis of the percentiles, as well as the graph and linear function, can be found in Appendix 3.

Starting Salary:	\$65,264
Three years after graduation:	\$71,657
Five years after graduation:	\$78,835
10 years after graduation:	\$89,818
20 years after graduation:	\$117,666
30 years after graduation:	\$144,730

Appendix 3: Provide a summary of wage data for graduates from similar programs at peer institutions and/or wages by experience level for the relevant occupations identified under (3.e.), citing authoritative sources such as the U.S. Census Bureau's Post-Secondary Employment Outcomes (PSEO) data, the PSEO Coalition's 'Living Wage vs. Postsecondary Graduate Earnings' by certificate level, Indiana DWD and 'Top Jobs', the MIT 'Living Wage Calculator' for Indiana and region, U.S. Department of Education's College Scorecard, the New York Federal Reserve's labor market data for recent college graduates, Indiana DWD, U.S. BLS, Lightcast, other proprietary tools, etc. (This appendix should contain tables upon which the above estimates are based upon and/or relevant pages from the analyses.)

• As required under IC 21-18-9-5(b), provide the estimated average total student debt and average monthly student debt payment of in-state graduates. Explain the basis for the calculations. Compare the estimated student debt to in-state and regional benchmarks and the estimated wages for the proposed degree program's graduates above. If applicable, confirm these estimates incorporated any special fees above baseline tuition under (5.e.). (Link to any cited sources. Cost comparisons to other state

educational institutions with similar programs should draw from the Commission's '<u>Data Accountability</u> and <u>Transparency Dashboard</u>' under IC 21-14-15-1.))

- o Individuals who qualify for Military Tuition Assistance should graduate the program without any debt.
- Cost of Attendance per Academic Year at \$633/CR. The approximate maximum amount of loans that a student may receive is \$46,783. Data is based on Total Cost of Attendance data available from the Division of Financial Aid.

Description	Notes	Cost
Tuition	\$633/CR x 18 CR	\$11,394
Housing/Food	Not a billed expense, based on West	\$12,820
	Lafayette, IN	
Books, Materials, Supplies, and	Varies by program, approximately	\$530
Equipment	\$530 per year	
Transportation	Varies by location. Data from	\$770
	Purdue Financial Aid website that is	
	used in a student's aid	
	determination.	
Miscellaneous and Federal Loan	Varies by type of loan. Data from	\$2,500
Fees	Purdue Financial Aid Website that is	
	used in a student's aid	
	determination.	
Annual Subtotal		\$28,014
Annual Program Total	A factor of 1.67 x \$28,014 (assumes	\$46,783
	that students graduate in 5	
	semesters)	
Annual Program Total Less	Removes the housing expense as	\$25,374
Housing	learners will already have housing	
	and are expected to work full time.	

https://www.purdue.edu/treasurer/finance/bursar-office/tuition/purdue-online-tuition-and-fees-2025-2026/college-of-liberal-arts/

- The calculations assume that students will not use Public Service Loan Forgiveness (the most conservative calculations).
- Students who wish to pay the least amount over time would have a monthly payment of \$529 and pay a total of \$63,432 over 10 years on a fixed repayment schedule if they borrow the maximum amount of loans (\$46,783).

### Standard Repayment Plan



This plan allows you to pay the entirety of your loan via fixed payments (at a minimum of \$50) over your loan term (10 years for most loans, but it is usually longer for consolidation loans).

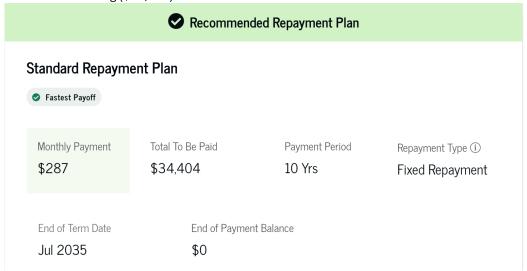
MONTHLY PAYMENT TOTAL TO BE PAID \$529 \$63,432

END OF TERM DATE ESTIMATED END OF PAYMENT BALANCE

July 2035 \$0

**VIEW FULL PLAN** 

Students who wish to pay the least amount over time would have a monthly payment of \$287 and pay a total of \$34,404 over 10 years on a fixed repayment schedule if they borrow the tuition less housing (\$25,374).



- o The Federal Student Loan Simulator was used to generate the estimated loan repayments.
- Explain how graduates will realize a positive return-on-investment in terms of completion rate, time to completion, net cost, job placement, and upward mobility to help address the sixth statewide goal ['6. Measurable distinction in economic and social mobility and prosperity outcomes'] of the HOPE (Hoosier Opportunities & Possibilities through Education) Agenda? (Link to any cited sources.)
  - The completion rate is expected to exceed 80%, and students can graduate in as few as five semesters while working full time.
  - The job placement rate is expected to be approximately 97%.
  - o The total net cost of the program is \$46,783 (or \$25,374 without the housing expense).
  - 50<sup>th</sup> Percentile starting wages are \$92,000, greatly exceeding the median earnings with a M.S. of \$65,264.
  - The tuition and fees are made up in the first-year salary differential (\$92,000 \$65,264 = \$26,736) at the 50<sup>th</sup> Percentile of wage earners with a MS in Homeland Security. If students take out the maximum loan, including housing expenses, a payment of \$529 on the standard repayment plan should be affordable at the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles of wage earners. If students borrow the total expenses less housing, the monthly payment of \$287 is even more financially viable for learners and their families.
  - Finally, students who work full time may receive a portion of their tuition through their employer.
     Under <u>Section 127 of the Tax Code</u>, employers can deduct \$5,250 for educational assistance programs.

# 5. Market Intelligence: Student Demand, Provider Competition, and Projected Enrollment

- a. Evidence of Student Demand and Interest
  - The proposal must provide evidence of strong interest and demand amongst prospective students, describing how the institution investigated and assessed authoritative data. Briefly describe the proposed program's recruitment and enrollment strategy.
    - We utilized a four-pronged approach to assess student demand for the new M.S. Strategy and Defense Security Technologies program.
      - 1. The initial launch of the professional development courses, concentration, and graduate certificate provided compelling interest of market demand.
        - a. The Interdisciplinary Engineering concentration enrolled 28 students in the Fall 2024 term.
      - 2. The military focus group led to conversations to military partners to refine the program to meet the needs of military-affiliated learners.
      - 3. Google Search Volume Analytics revealed high organic interest in education programs related to security, military, strategy, defense, and war, with a total of 8,860 combined monthly searches.
      - 4. We utilized Lightcast to assess demand for homeland security positions and to identify program conferrals at competitor institutions. The analysis was conclusive: this is a unique offering in the market with no identical competitors.
    - Summary: The tailored approach to reach a specific group of military and defense personnel will lead to a viable program. The graphic below identifies the top-conferring institutions with their program specializations. We believe this program is unique given the low tuition and the programmatic emphasis on technology and strategy. Finally, the high organic search volume traffic suggests that the general market will also be interested in the offering, especially considering the affordable tuition.

### Relevant Student Interest Data

- Search Volume Analytics (Google, 2025)
  - Security: 7,300 searches per month within the context of education
  - Military: 930 searches per month within the context of education
  - Strategy: 350 searches per month within the context of education
  - o Defense: 190 searches per month within the context of education
  - o War: 90 searches per month within the context of education

che.IN.gov

Purdue University's online recruitment and enrollment success is driven by strong cross-functional collaboration among marketing, recruitment, admissions, and our student success teams. This collective effort ensures that every stage of the learner journey, from initial awareness through enrollment and beyond, is supported by coordinated strategies, consistent messaging, and a shared commitment to delivering an exceptional learner experience. Our marketing team plays a vital role in shaping Purdue's brand awareness and generating interest through targeted, high-impact lead generation campaigns that align with academic and workforce priorities.

Purdue University employs a robust, data-informed recruitment strategy designed to attract, engage, and enroll a diverse population of prospective online graduate learners. Our general acquisition approach begins with a strong marketing foundation, where the marketing team promotes Purdue's online programs across a variety of digital and traditional platforms to generate high-quality leads. These channels include paid search, social media advertising, SEO-optimized web content, email campaigns, and strategic partnerships with lead generation vendors. Messaging is crafted to reflect Purdue's academic excellence, practical outcomes, and learner-first philosophy, enticing prospective learners to take their next giant leap with us.

Purdue's reputation for delivering high-quality, research-driven graduate education is central to our messaging and engagement. We are deeply committed to creating accessible, rigorous, and relevant online learning experiences that meet the evolving needs of working professionals, career advancers, and lifelong learners. This commitment is reflected not only in our academic offerings but in every stage of our recruitment and enrollment strategy.

Our lead funnel strategy includes a phased communication cadence segmented by interest level and engagement stage, developed in close collaboration with the marketing team. New leads receive a tailored 60-day outreach sequence, transitioning into a 90-day active lead cadence upon meaningful engagement. These phases combine automated and manual touchpoints including email, SMS, phone calls, videos, and personalized follow-ups. These are designed with the marketing team's support to ensure consistent and compelling messaging. For unresponsive prospective learners, the marketing team also leads the development and deployment of a long-term nurture campaign that extends outreach for up to nine months.

Once an application is initiated, Purdue continues to guide learners through structured communication plans designed to drive submission, admission, and enrollment. This includes personalized recruiter outreach, application-specific email drips, and targeted campaigns such as Drive to Apply and Drive to Enrollment, which align with academic term cycles to accelerate progression through the admissions process.

In-person recruitment further reflects Purdue's commitment to connecting meaningfully with learners. Each semester, Purdue University online programs participate in a range of high-visibility events such as national conferences, military base visits, education fairs, on-campus events and networking meetups where recruiters offer individualized support, answer questions, and build relationships that reflect the human-centered values of our institution.

That support continues well beyond admission. Our dedicated Student Success Team, including advisors and success coaches, provides personalized guidance on course planning, time management, registration, and academic resources. Each learner is matched with a consistent advisor to support them throughout their academic journey.

At every stage, Purdue's recruitment and enrollment strategy reflects our values: academic excellence, accessibility, and a learner-centered approach. Through coordinated outreach, cross-team collaboration, and the strategic use of technology coupled with in person engagement, Purdue demonstrates the clear capacity to recruit and support learners in high-quality academic programs that meet today's workforce needs and those of the future.

Appendix 4: In addition to the above narrative analysis, include authoritative data tables demonstrating student interest and demand, such as web traffic and search engine analytics and student surveys. Save the details for specific enrollment projections for (5.c.). (This appendix should contain graphs/tables, relevant pages from analyses, and/or links to cited sources.)

### b. Provider Market Inventory: Details on Similar Programs at Other Institutions

The proposal must demonstrate the institution has carefully investigated the current provider landscape for similar programs within the state, Midwest geographic region, and, depending upon the nature of the program, across the nation.

### **List and Describe Similar Programs at Indiana Institutions**

- Indiana institutions offering similar programs (on-campus and/or distance education). Include
  information on pertinent details, such as institutional Carnegie Classification; public/private; CIP Code;
  credit hours; on-campus/on-line/blended; any program specializations, concentrations, or tracks; any
  non-HLC programmatic accreditation/certification, if applicable; and, briefly identify what distinguishes
  these programs. Identify primary competitors, if applicable. (Provide a link to each program's primary
  webpage.)
  - There are no identical programs in Indiana; however, there are two graduate programs offering training in homeland security, which is the closest-related CIP code.
    - Indiana University-Indianapolis and Indiana University-Kokomo: <u>Graduate Certificate</u> in <u>Homeland Security and Emergency Management</u>
      - 15 credit hours
      - Indiana University's program is focused on emergency management and risk assessment.
    - Purdue Global: MS in Homeland Security and Emergency Management
      - 9 total courses
      - Purdue Global's program is heavily focused on emergency management. The nascent West Lafayette program emphasizes technology, security, and diplomacy.

### List and Describe Similar Programs at Regional and Peer Institutions Outside Indiana

- Institutions in contiguous states, MHEC states, or the nation, depending upon the nature of the proposed program, offering similar programs (on-campus and/or distance education). Include information on pertinent details, such as institutional Carnegie Classification; public/private; credit hours; on-campus/on-line/blended; any program specializations, concentrations, or tracks; any non-HLC programmatic accreditation/certification, if applicable; and, briefly identify what distinguishes these programs. Identify primary competitors, if applicable. (Provide a link to each program's primary webpage.)
  - Kennesaw State University: <u>Certificate in Intelligence and Homeland Security</u>
    - Focus areas: international politics, crisis management
  - American University: <u>MS in Counter-Terrorism and Homeland Security</u>
    - Focus areas: national security law and policy, counterterrorism, cybersecurity, and the causes of political violence
  - o Penn State World Campus: MS Homeland Security
    - Focus areas: policy, national strategy and security, homeland security strategy
  - o Liberty University: MS National Security
    - Focus areas: emergency management, border security, terror groups, and cyber warfare
  - Arizona State University: MA Emergency Management and Homeland Security
    - Focus areas: biosecurity and threat management, community resilience, cybersecurity policy and management, emergency management, and homeland security
  - Naval Post Graduate School: MA Homeland Security
    - Focus areas: policy, intelligence, communication, and leadership
  - o Georgetown: MS Security Studies
    - Focus areas: area security, economics and security, and technology and security

### c. Provider Market Analysis: Similar Programs' Output, Growth, and Market Share

- In relation to the student interest and demand information under (5.a.), cite the most recent authoritative completion data of the programs identified under (5.b.) to assess the maturity of the market and demonstrate whether it is trending upward, downward, or stable. Why does the institution believe it can enter the market to reach viable enrollment/completions under (5.d.)?
  - o 33 institutions offer graduate training in homeland security (CIP 43.0301), which has grown by 6% between 2019-2023. There were 923 Master's conferrals in 2023, up 18% from 2019. 806 of the 923 conferrals were from online programs (Lightcast, 2025). The figure below shows that 8 of the top 10 conferring programs are generally trending upwards, with two providers experiencing enrollment declines.
  - While Lightcast is an authoritative and reliable data source, this program is unique in the market with no identical competitors. Further, we are creating our own demand through academic-to-military and academic-to-business partnerships. While we do expect some students to enroll through general acquisition efforts, these will be supplemental to the partnership enrollments. The figure below demonstrates market potential for general acquisition efforts only. Through conversations with the Advisory Board and prospective partners, we have strong evidence that the student demand for the program far exceeds enrollment potential for homeland security CIPs as reported by Lightcast in 2023.

Institution	Master's Degree Completions (2023)	Growth % YOY (2023)	Market Share (2023)	IPEDS Tuition & Fees (2023)	Completions Trend (2019-2023
American Public University System	138	16.9%	15.0%	\$8,400	<b>\</b>
American InterContinental University System	124	2.5%	13.4%	\$12,310	
Pennsylvania State University-World Campus	117	-24.0%	12.7%	\$15,204	
⊕ American University	104	62.5%	11.3%	\$56,543	
⊕ Naval Postgraduate School	94	141.0%	10.2%	N/A	
⊕ National University	43	-2.3%	4.7%	\$13,320	<b>\</b>
⊕ Sam Houston State University	35	29.6%	3.8%	\$9,228	
⊕ Columbia Southern University	34	240.0%	3.7%	\$5,808	
⊞ Fairleigh Dickinson University-Metropolitan Campus	30	50.0%	3.3%	\$37,686	
Pace University	17	54.5%	1.8%	\$51,424	

Lightcast (2025). CIP. 43.0301

<u>Appendix 5:</u> In addition to a narrative analysis above, include the most recent data for the applicable programs' completions, growth trends, and market share data, such as the most recent IPEDS or Lightcast data. (This appendix should contain graphs/tables, relevant pages from the analyses, and/or links to cited sources.)

### d. Projected Enrollment/Completions and Threshold Viability

- The proposal must demonstrate a realistic pathway for the degree program to reach viability in terms of the three-year rolling average for degree conferrals required under IC 21-18-9-10.7 after the program exits its corresponding 'Ramp Up Period' by degree type.
- As required under IC 21-18-9-5(b), explain the basis for the projected enrollment and degree conferral figures; the projected completion rate must be provided.
- Replicating the corresponding degree type-specific table template below, insert a completed table with
  multi-year projections for headcount, FTE enrollment (rounded to the nearest whole number), and
  degrees conferred in a manner consistent with the Commission's student data reporting and collection
  procedures. Specify the rolling average of degree conferrals for the final three-year period under
  analysis.
  - o If applicable, provide a table for each campus at which the program will be offered
    - Not applicable.
  - If the program is offered at more than one campus, e.g., an online multicampus collaborative, a summary table, which reports the total headcount and FTE enrollments and degrees conferred across all locations, must be provided.
    - Not applicable.

M.S. Strategy in Security and Defense Technologies								
Enrollment Projections (Headcount)	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Full-Time	0	0	0	0	0	0	0	0
Part-Time	15	60	75	95	115	135	145	150
Total	15	60	75	95	115	135	145	150
Enrollment Projections (FTE)								
Full-Time	9	36	45	57	69	81	87	90
Part-Time	0	0	0	0	0	0	0	0
Total	9	36	45	57	69	81	87	90
Degrees Conferred Projections	0	12	48	60	76	92	108	116
						3-year rolling	average of g	raduates: 10
Projected 3-Year Completion Rate: 80%								
Proposed Degree Program: M.S. Strategy in Security and Def CIP Code: 43.0301	ense Technologies							

### 6. Program of Study: Curriculum, Quality, and High-Impact Practices

### a) Required Credit Hours and Coursework

- Specify the credit hours required for the proposed program.
  - If the associate or baccalaureate degree program exceeds 60 or 120 semester credit hours, respectively, the institution must summarize the reason for exceeding this standard expectation under IC 21-18-9-8(d).
    - 30 credit hours
    - Appendix 6 does not apply.

<u>Appendix 6:</u> Exceeding the Standard Expectation of Credit Hours, Detail (This appendix, if necessary, should contain detailed information on why it is necessary to exceed the standard credit hour expectation, such as links to relevant licensure and/or accreditation standards.)

Provide an overview of the degree's course requirements, including a list of required core courses and
prescribed/restricted electives by area, if applicable. Include short course descriptions and, if
necessary, notations for new courses or courses needing to be developed.

### **REQUIRED CORE COURSES (18 CREDITS)**

Students are required to complete all courses. No transfer credits are available.

Course Number	Course Title	Credits	Approved/Developed
SCLA50500	Technology, War, And Strategy	3 credits	Х
SCLA50700	Grand Challenges In Defense Engineering	3 credits	Х
SCLA53000	Strategic Foresight and Leadership	3 credits	Х
SCLAXXXX	Legislative Policy and Defense Technologies	3 credits	In process
SCLAXXXX	Ethical Reasoning in Technology	3 credits	In process
SCLAXXXX	Capstone* (16 weeks)	3 credits	In process

### SELECTIVE REQUIRED CORE (6 CREDITS) - STRATEGY FOCUS AREA

Students will take at least 2 of the courses below

Course Title	Credits	Approved/Developed
Space Strategy	3 credits	Х
Cyber Strategy	3 credits	Х
Strategic Intelligence	3 credits	Х
Data and AI Storytelling *	3 credits	Х
Al Organizational Transformation for Security	And Defense 3 credits	In Process
Game Theory Strategy & Defense	3 credits	Х
	Space Strategy  Cyber Strategy  Strategic Intelligence  Data and AI Storytelling *  AI Organizational Transformation for Security A	Space Strategy 3 credits  Cyber Strategy 3 credits  Strategic Intelligence 3 credits  Data and AI Storytelling * 3 credits  AI Organizational Transformation for Security And Defense 3 credits

### **ELECTIVES (6 CREDITS)**

Students choose a minimum of 6 credit hours elective list.

### Liberal Arts

- SCLA59000 Special Topics 1-6 credits
- SCLA52000 Social And Digital Media Analytics for Strategic Communication\* 3 credits
- POL52601 Technology, AI, And Ethics in Public Policy and Public Administration 3 credits

### Organizational and Leadership Science (Purdue Polytechnic Institute)

- OLS58000 Interpersonal and Group Skills for Leaders 3 credits
- OLS58100 Leading Teams 3 credits
- OLS58100 Strategic Planning and Marketing in Technology 3 credits

### Computer and Networking Technology (Purdue Polytechnic Institute)

- CNIT51000 Data Literacy 3 credits
- SYS5000 Perspectives on Systems 3 credits

### **COURSE DESCRIPTIONS**

### CNIT51000 - Data Literacy

This course examines concepts, models, and methods useful for applying data analytics in business environments. Focusing on hypothesis generation, the capturing, storage and expression of data, analysis for research and visualizations.

### OLS58000 - Interpersonal and Group Skills for Leaders

Development and improvement of interpersonal and group dynamic skills for effective leadership in organizations. Emphasis on action learning and real-world application of skills. Course may be offered in traditional, distance, or blended format.

### OLS58100 - Leading Teams

This course focuses on leadership processes both internal and external and the leadership functions that help teams satisfy their critical needs and regulate their behavior through goal accomplishment.

### OLS58100 - Strategic Planning and Marketing in Technology

Examines concepts, models and methods useful for developing strategic initiatives in industrial business environments. Focuses on planning concepts, including industry structure, strategic mission, organizational structures, competitor analysis and technological forecasting magnitude.

### POL52601 - Technology, AI, And Ethics in Public Policy and Public Administration

Examines how emerging technologies like artificial intelligence (AI), automated decision systems, and digital platforms are being adopted in the public sector. It explores the benefits as well as ethical risks and challenges associated with implementing these technologies in areas like healthcare, education, child welfare, and criminal justice. Students will analyze governance strategies, policies, and administrative procedures to promote responsible technology use in government.

### SCLA50500 - Technology, War, And Strategy

This course blends history with social science theory and policy concerns in a study of the theoretical underpinnings of strategy and its intersection with technology. The course examines several historical case studies in which technological innovations intersected with history-making demands. The course also analyzes contemporary issues

related to technology and strategy, focusing on U.S. defense policy in the post-World War II era. The overriding idea of the course is that no technology is strategic by definition. It is its use and reinvention in continuing use that makes it strategic.

### SCLA50600 - Space Strategy

This course analyzes the origins, tensions and promises embedded in the space-focused strategies. The course material discusses these issues from the national and strategic interests' perspective, focusing on how competition and conflict in space – the most recent domain in which nations and great powers dispute political, military, economic, and legal interests – could and should be handled. That question is examined in the context of grand strategy, defined as the harnessing of military, economic and political power over decades and centuries to advance the nation. Space is the ultimate high ground, and if the United States wants to continue in its preeminent position, it must dominate that high ground.

### SCLA50700 - Grand Challenges In Defense Engineering

This course examines challenges in energy, logistics and information processing, and rapid offensive and defensive systems in the context of the past, the present and the future to develop new conceptual insights, research priorities, system integration, and timely methods to meet emerging national defense engineering needs. The curriculum considers such topics as the Manhattan Project, the development of containerized shipping, artificial intelligence, hypersonics, rail gun technology and more. Each module covers different topics while prompting students to examine creative solutions inspired by the past and use the lessons learned to stimulate thinking needed for solving future challenges.

### SCLA50800 - Cyber Strategy

Cybersecurity is a crucial domain upon which individuals, organizations, communities, states, nations, and great powers rely to protect cyber-based personal, business, economic, infrastructural, community, legal, strategic political, and military interests. The course analyzes the policies, issues, risks, and opportunities embedded in the cyber strategies of organizations. The course will discuss these issues from the perspective of the U.S. national and strategic interests, focusing on how cyber issues and conflicts could and should be handled. Among the cyber strategy key considerations to be discussed are: Understanding and assessing an organization's cyber threat landscape; Assessing an organization's cybersecurity maturity; Organizational cyber strategy goals; Cyber strategy policy-making process; Examination of strategies for strengthening, defending, and maintaining an organization's cyber infrastructure -Models, requirements, frameworks, and best practices; Management commitment and responsibilities to an organization's cyber strategy and policies; Cyber strategy staffing, training, and budgeting; Global and domestic cyber business relationships in governmental and private industry; Promoting awareness of historic, ongoing, and emerging cyber threats and actors; Promoting awareness of domestic, global and insider cyber threats and actors; Cyber risk management; Cyber incident management.

### SCLA50900 - Strategic Intelligence

Strategic Intelligence refers to the collection of organizations, technologies, procedures, and policies that great powers, particularly the United States, use to provide the supreme political leadership the understanding needed to plan and execute future national security strategies. A significant portion of the strategic intelligence process is conducted by specialized organizations that use advanced technologies. The intelligence can, in turn, focus on the technological capabilities of the country hosting the strategic intelligence organization or their adversaries. Thus,

strategic intelligence has a significant technological component, both as a tool for and as a domain for investigation. The present course will examine all facets of strategic intelligence, anchoring the investigation around specific organizations and processes, from the major civilian to the major military-strategic intelligence agencies, the legislation that directs their work, and the supervisory bodies. The course will also include case studies that analyze and operationalize how intelligence agencies contribute to national security. The course aims to provide the students with a rounded and practical education in strategic intelligence, describing who is responsible for its deployment and exploitation and what its benefits are for national security.

### SCLA51000 - Data and AI Storytelling \*

This course centers around understanding and communicating data in a way that informs, compels, or reassures – a core personal and professional skill for anyone who wants to be a successful member of the 21st century community. Telling effective data stories combines elements of rhetoric, data science, visualization, and storytelling, with artificial intelligence now becoming a prominent tool in the process. The course is subdivided into six modules, the first covering basics of storytelling with the following five modules diving deeper into each step of building a data story that surprises, provides a new, more convincing explanation for or alternative to time-worn ideas, and proposes a course of action. The goal of the class is to train learners in making memorable, teachable, data-driven arguments in the form of stories.

### SCLA51200 - AI Organizational Transformation for Security And Defense

The course explores how AI technologies can optimize business processes, improve efficiency, and transform operational models across all sectors, including warfighting. It highlights human-AI interaction within organizational contexts. No programming skills are required, but it does require computer and digital literacy appropriate for managing organizations with extensive IT environments.

### SCLA51300 - Game Theory Strategy & Defense

This course explores the intersection of strategic decision-making and national defense through the lens of game theory. Participants will develop analytical and strategic skills by studying three interconnected modules: (1) Game Theory Foundations: understanding the fundamentals of strategic interactions, Nash equilibria, and applications to competitive and cooperative settings, (2) Mechanism Design: Crafting systems to incentivize desired outcomes, with a focus on resource allocation and strategic interactions in defense, (3) Social Choice: analyzing how groups can make collective decisions in a way that balances fairness, efficiency, and strategic behavior. A final module of the course will apply the concepts developed in a family of games called Attacker-Defender games, which model scenarios involving adversarial interactions, including cybersecurity, physical security, and military strategy. The course connects theoretical frameworks with real-world defense challenges, analyzing past, present, and future applications. By the end of the course, participants will be equipped to apply these concepts to complex, rapidly evolving strategic environments in national and global defense.

### SCLA51400 - Ethical Reasoning in Technology

In today's rapidly evolving technological landscape, ethical decisions are increasingly crucial for technology developers, entrepreneurs, policymakers, and consumers alike. This course explores the principles of ethical reasoning and their application to complex technological dilemmas.

Through a structured learning approach, we examine key concepts in ethics, including Deontological, Consequentialist, and Virtue Ethics, and apply these frameworks to analyze tradeoffs in various technological contexts. Students will engage with real-world case studies that highlight the importance of context-sensitive thresholds and principled reasoning in technology decision-making.

We delve into the nuances of tradeoff analysis, exploring how competing values such as autonomy, justice, trust, benevolence, non-maleficence, and transparency must be weighed against one another. Through a combination of theoretical foundations, experiential learning, and critical analysis, this course aims to develop students' ability to think critically about ethical issues in technology and make informed decisions that balance competing values.

### SCLA52000 -Social And Digital Media Analytics for Strategic Communication\*

This course provides an overview of how to transform social media and digital media information into business intelligence and actionable insight. Although students are not expected to know a programming language prior to taking the course, students are expected to understand basic statistics and to have a desire to learn the processes, procedures and vocabulary used by data analysts in modern organizations. The goal is not to train them as practicing data scientists, but as knowledgeable data analytics consumers and as informed teammates and leaders of cross-functional teams tasked to make decisions using data.

### SCLA53000 - Strategic Foresight and Leadership

This course provides learners with strategic foresight tools and skills to understand and make decisions regarding the future. Strategic foresight is the ability to create and sustain a variety of high-quality, long-term views and apply insights in adaptive ways. Strategic foresight produces forward-looking views, commonly referred to as scenarios, and these are used to broadly describe what a future world would look like, and how it would feel to live in that world. These scenarios form the basis for strategies and plans to help organizations remain competitive into the foreseeable future. Students in the course will use strategic foresight to create their own scenarios.

### SCLA 55000 - Strategy for Security and Strategy Technologies Capstone

The capstone course for the Online MS in Strategy for Security and Defense Technologies provides the students with the opportunity supported by a faculty mentor to bring together the learning and practical experiences they encountered throughout the course of the program in a practical impact research product that highlights how well they master the strategic thinking and doing competencies that undergird the philosophy of the course, as described in the foundational paper "What Should a Strategist Know and Do and Why?" by Matei, Graves, and Benson. The capstone project is expected to be rooted in a practical case study inspired by the students' professional activity or interests. A set of directive questions is offered as guidance for selecting the topic and working with the mentor. The final format of the project can take a variety of forms, all with practical impact.

### SCLA59000 - Special Topics

This course, whose specific topics might change, focuses on strategy and military studies a global scale. The course will be rooted in all the elements of strategy (political, military, economic and cultural), plus strategic theory and technology's impact on it. The course exposes students to a set of historical and contemporary strategic dilemmas

that involved difficult trade-offs, costly investments, wild risks, incredible victories, and crushing defeats. This is a multidisciplinary course that focuses on several core ideas and principles that cut across schools of thought and examples from past, present and future.

### SCLAXXXX - Legislative Policy and Defense Technologies

The course on Legislative Process for Defense Technologies presents that typical political, legal, and administrative process that a technological idea traverses from inception to execution as a specific technology. The course analyzes the Department of Defense and entrepreneurial innovation and acquisition process, while providing grounding in the role played by Congress, the executive branch, and the military in bringing technological ideas to life. The course will provide a series of past, present and near future case studies to describe the boundaries and structure of the process.

### SYS5000 - Perspectives on Systems

This course provides an introduction to, and references for, each of four distinct approaches to SE concepts and tools. Individual assignments and team projects will be based on readings from these multiple approaches and selected case studies. Participants will be encouraged to bring their own prior expertise and examples to the discussions and projects. While the course will discuss quantitative topics (including cybernetics, feedback control systems, and statistical process control), the course itself will emphasize a more interdisciplinary conceptual integration rather than stand-alone analysis of these topics.

### b) Accelerated Delivery Options

- As required under IC 21-18-9-5(b), specify and describe whether the proposed course of study provides options for accelerated delivery, if applicable, such as a structured 'Degree-in-3' baccalaureate, dual degrees, or an accelerated master's program (3+2 or 4+1).
  - At the time of proposal submission, the program does not have any articulation agreements in place for 4+1 programs, although we regularly explore these opportunities.
  - Trends from enrolled students demonstrate that students, especially those in similarly situated programs, enroll in approximately 6 credit hours per semester. Students may enroll in more than 6 if they wish to graduate in fewer than five semesters.

### c) Opportunities for Credit for Prior Learning

- As required under IC 21-18-9-5(b), list and describe all opportunities to earn credit for prior learning (CPL) at a college-level through military experience and prior workforce/professional experience. Briefly explain how prospective and entering students will be informed of these opportunities. (Insert or link to the proposing institutions' applicable certification CPL crosswalks, Joint Service Transcript CPL crosswalks, Indiana Collegiate Purple Star information, if applicable, and/or policies on CPL individual assessments or CPL portfolio reviews.)
  - Purdue University has a team of Admission Coordinators who work with prospective students on application submission to prepare documents and reduce barriers to admission. Up to 12 credit hours of prior coursework may be articulated into the program, pending faculty review of the coursework for applicability.
  - There is a non-credit-to-credit pathway established for the initial four courses that were developed as part of the Strategic Defense Technologies Graduate Certificate. Students who have already completed these courses may articulate them into the degree program (up to 12 credit hours).

At the time of proposal submission, there are not credits that are awarded for work and/or military experience. However, relevant coursework and/or training and industry certifications may be considered for academic credit if it satisfies course requirements. Admissions coordinators will work with students as they are seeking admission into the program to discuss an individualized approach for students who wish to explore credit for prior learning opportunities. Students may articulate up to 12 total credit hours from non-credit-to-credit pathways and transfer credit from other institutions.

## d) Opportunities for Embedded, Stackable Credentials and Degrees

- As required under IC 21-18-9-5(b), list and describe all embedded, stackable credentials or degrees a
  student can readily earn within the course of study, including microcredentials, credit-bearing
  certificates, and industry-recognized credentials. Briefly describe their learning outcomes and currency.
  (Link to any applicable websites for these credentials/degrees.)
  - o In addition to the M.S. Degree, students may also earn the <u>Graduate Certificate in Strategic Defense Technologies</u> (12 credit hours, articulates into the M.S.) if they apply for the graduate certificate. Students may apply for the Graduate Certificate and the M.S. in the same application. Students will need to finish the Graduate Certificate either before the completion of the M.S. or at the same time. The Graduate Certificate is not able to be added once a student finishes the M.S. The Graduate Certificate is transcripted and students are awarded a diploma (Course-level learning outcomes are in the above link).
    - The same four courses in the Graduate Certificate are also offered as individual microcredentials. Students may enroll in these courses as non-credit learners and articulate the credits into the M.S. program.
    - Students will earn a badge and a certificate of completion for successfully fulfilling the course requirements.

## e) Work-Based Learning and/or Experiential Learning Requirement

• As required under IC 21-18-9-5(b), specify whether the proposed program of study requires a work-based learning or experiential learning experience, yes or no?

Work-Based Learning Requirement	Yes □	No ⊠
Experiential Learning Requirement	Yes ⊠	No □

- If applicable, describe the necessary course(s), credit hours, work/practica/clinical hours, and other requirements. Specify how these opportunities will connect students with employment opportunities and/or further education (graduate/professional school).
  - A distinguishing dimension of the program is the inclusion of in person, optional, experiential learning. We anticipate three travel-and-learn experiences, one in Washington, DC, in collaboration with the <a href="Krach Institute">Krach Institute</a> for Tech Diplomacy at Purdue, where we will explore topical technological issues relevant to defense and security, a trip to Europe to explore and discover technological use in security and defense in NATO nations, and a trip to the INDOPACOM area, including Hawaii and Taiwan, where the students will learn more about great power military technological competition in the Pacific. Through these partnerships, learners will have multiple opportunities to engage with various employers through multiple agencies.

- If there are no such requirements, briefly explain why not and how students will still have opportunities to engage in work-based or experiential learning.
  - While the trips are not a requirement of the program to graduate, we anticipate that students will participate in at least one trip. Students will have multiple opportunities to engage with classmates, industry experts, and faculty members as they matriculate throughout the program. The courses incorporate hands-on, authentic learning experiences that are directly applicable to students' work in their organization. Students will also have the opportunity to engage in rich course discussions, games, and simulations throughout the program.

## f) Capstone Course(s) and High-Impact Practices

Does the proposed program require students to complete a capstone course or capstone sequence which provides a structured, culminating experience for their learning, such as a major project or thesis?



- Identify and briefly describe any evidence-based 'High-Impact Practices' incorporated into the curriculum of the proposed degree program, such as a first-year experience, capstone course or capstone sequence, seminars, and undergraduate research.
  - All students will complete a capstone course whose learning objectives are derived from the core competencies and body of knowledge acquired through the program. Students are expected to identify through individual research and drawing on professional experience a project that creates or evaluates a defense or security strategy that focuses on a specific technology. The students will apply the competencies and knowledge acquired through the courses they completed to generate practically oriented proposals and briefs. Students should demonstrate that the ideas incorporate elements of originality, critical thinking, are practicable and implementable within current or near future timelines.
  - Most courses invite the students to apply the knowledge they have acquired to real-life examples extracted from their professional experience or by reference to real-life or realistic case studies.

## g) Career Readiness and In-Demand Transferrable Skills

- Describe student engagement and instructional experiences with career relevance that place an emphasis on developing multiple career readiness competencies and in-demand transferable skills. For example, does the curriculum incorporate career exploration and preparation courses?
  - The courses are informed by a set of cross-domain strategic thinking and doing competencies outlined in an anchor document that all students are required to study ("What should a strategist know and do and why?") These competencies refer to skills and knowledge sets that enable success across various professions, including trade-offs, systems thinking, and indirect thinking, as well as analytical abilities, ethics, and negotiation.

## h) Assessment

- Summarize how the institution intends to assess students with respect to mastery of proposed program's learning outcomes (competencies, skills, knowledge, and experiences) listed under (3.b.).
  - The approach to assessment is multi-faceted and includes formal and informal assessments. Students can practice their new learning on formative assessments including practical assignments, case studies and collaborative learning. Course examinations are derived in a direct and consistent way with course-level level objectives and program-level outcomes. Most

- courses in the program will include authentic, real-world projects to allow students to demonstrate their mastery of key course concepts.
- Course- and program-level outcomes are regularly reviewed to ensure alignment. Course designs are on a three-year cadence to ensure that they contain the most up-to-date information and their continued alignment with program goals. We will also monitor students' post-graduation and solicit their feedback as part of continuous improvement efforts.

#### i) Accreditation/Certification

• Other than the Higher Learning Commission, is there an applicable programmatic accrediting/certifying body (or bodies) for this course of study? (If yes, link to the relevant curricular and programmatic standards of the accreditor(s).)

Yes 🗆	No ⊠	If yes, specify:
-------	------	------------------

• In reference to external input on program design under (3.a.), was the program of study developed in alignment with the standards of an applicable programmatic accrediting/certifying body (or bodies) specified above? If yes, specify the body and corresponding standards.

Yes 🗆	No ⊠	Not Applicable (N/A) □
If yes, sp	ecify:	

• Will the program be seeking programmatic accreditation/certification, if applicable? If yes, specify the accrediting body and anticipated timetable. If not, explain why.

Yes □	No ⊠	Not Applicable (N/A) $\square$
res 🗆	NO 🖾	Not Applicable (N/A) □

### j) Artificial Intelligence (AI) Fluency and Competency

- Explain how the program of study intentionally incorporates Artificial Intelligence (AI) to optimize the learning experience as well as prepare graduates for the shifting nature of work.
  - The program includes courses that directly address Al-anchored knowledge and skills, specifically "Al Organizational Transformation in Security and Defense," "Data and Al Storytelling," and Strategic Foresight. Some course assessments include critical examination and use of Al tools, from predictive models to generative Al.

## k) <u>Licensure and Certification - Does not apply</u>

Graduates of this program will be prepared to earn the following:

State License:	
National Professional	
Certifications (including the	
bodies issuing the certification):	

Third-Party Industry Certifications	
(including the bodies issuing the	
certification):	

## l) Defined Pathways for Certain Student Populations

- As required under IC 21-18-9-5(b), provide defined degree map pathways for the following student populations, contemplating how long a full-time and part-time student, as applicable, will need to complete the program:
  - High School
    - High school students are not eligible for the program. They would need to earn a B.S. We may expand the program to offer either 4+1 or 3+2 agreements, but as these do not currently exist, there is not a defined pathway for high school students.
    - Assuming that it would take 4 years for a high school student to graduate college, it would take at least four years to matriculate through their B.S. program, and then 5 semesters of part-time study at 6 CR each semester. A full-time student could complete the M.S. program in as few as 3 semesters, enrolling in 9-12 CR each semester.
  - Returning
    - As with high school students, returning students would need to complete a B.S. degree before they are eligible for enrollment into the program. It would take between 1-4 years for such students to earn a B.S., and then 5 semesters of part-time study at 6 CR each semester. A full-time student could complete the M.S. program in as few as 3 semesters, enrolling in 9-12 CR each semester.
  - Adult (assume part-time)
    - Adult students are the primary target audience for this degree program. We assume adults with a B.S. will graduate in 5 semesters, enrolling in 6 CR per semester.

Appendix 7: Degree Maps by Each of the Specified Student Populations, Detail (This appendix should contain the semester-by-semester, course-level detail on the program curriculum, including how long it will take to complete the program, assuming full-time or part-time study, as applicable.)

## m) Transfers from Two-year Institutions: Articulation Agreements

- \*\*All institutions proposing baccalaureate degrees must address program articulation pathways, such as the Indiana College Core and/or a Transfer Single Articulation Pathway (TSAP). \*\*
- For each articulation agreement, indicate how many of the associate degree credits will transfer and apply toward the baccalaureate program.
  - Does not apply.

<u>Appendix 8:</u> Articulation of Associate/Baccalaureate Programs, Detail (This appendix should contain the actual articulation agreements relevant to the proposed program. Prior to submitting the program proposal to the Commission, universities should work directly with Ivy Tech Community College and Vincennes University to develop articulation agreements that maximize transfer opportunities for students.)

# 7. Programmatic Costs

## a. Fiscal Support

 Characterize the budgeting source to launch and sustain this program followed by a brief explanation of the context:

New ⊠	Existing 🗆	Reallocated
-------	------------	-------------

- New online programs at Purdue University are all self-supporting. The costs to support the program, including instruction, instructional design, student acquisition, student support, and fees will all go to a program account. Revenue from tuition and partnerships will go to the same program account. All new programs typically break-even and have revenue distributions to academic units by the third year. Our financial model shows a Year 3 break-even.
- Summarize any recent reallocation of resources to support this program, including any eliminated or downsized programs to provide resources for this program?
  - No reallocations or reductions are needed. The program will be funded entirely through new revenue streams.
- Elaborate on any innovative fiscal strategies to sustain this program.
  - The program is expected to be financially viable through targeted student acquisition efforts and military partnerships. Leveraging a matrix model, program supports are allocated as fractional FTEs. That is, full-time employees support a number of programs, and their salaries are paid through program revenue. Supports are scaled up or down to ensure that the appropriate level of support is allocated to meet the needs of learners. This highly efficient strategy ensures that every program across the portfolio receives the appropriate level of service. Further, instructional expenses scale with enrollments. The courses are designed by Purdue faculty, and some will be taught by industry experts. As enrollments scale, we will be able to administer the program without needed to add additional FTEs to support it until the program revenue justifies such expenses.

## b. Cost to Operate and Per Student Cost

- As required under IC 21-18-9-5(b), provide the projected cost to operate the proposed degree program, including the estimated cost per FTE student in the program. How does this compare to similar programs at other state educational institutions?
  - \$8,043 per learner. The annual costs to operate the program average to \$663,522. Please refer to Appendix 9 for the full calculation and budget.
  - According to the HEA dashboard, our costs-per-learner are low compared with other institutions in the State of Indiana, highlighting our nimble approach to new online program development.
     As a large enrollment program, our tuition and operational costs are competitive among institutions in Indiana.

Appendix 9: Operating Cost Budgeting Estimates (This appendix should contain budgeting estimates and the per student cost. Comparisons to similar degree programs at other state educational institutions should draw from the Commission's 'Data Accountability and Transparency Dashboard' under IC 21-14-15-1.)

## c. Faculty and Staff

- Of the faculty and staff required to offer this proposed program, how many are preexistent and how many will need to be added (express both in terms of number of full- and part-time faculty, including title and status, such as non-tenure track)? Specify whether the proposed program will utilize adjunct or clinical faculty, such as industry experts and practitioners.
  - o The program leverages faculty who are already in place to provide instruction in the program.
  - We will also leverage industry content experts as limited term lecturers (adjunct instructors) to supplement instructional capacity as needed.

<u>Appendix 10:</u> Faculty and Staff, Detail (This appendix should contain a list of faculty with appointments to teach in the program and a brief description of new faculty positions yet to be filled.)

## d. Physical Plant and Capital Equipment Costs

- Summarize physical plant and capital equipment cost requirements to successfully launch and deliver the proposed program, such as renovations to existing facilities, requests for new capital projects (including a reference to the institution's capital plan, if applicable), the leasing of new space, and/or the purchase of needed equipment.
  - Does not apply.

<u>Appendix 11:</u> Capital Costs, Detail. (If necessary, this appendix should contain additional information on capital costs to successfully launch and deliver the proposed program.)

#### e. Collaborative Support and Curricular Synergies

- Identify programs at the proposing institution that overlap, complement, strengthen, or otherwise would
  be impacted by the proposed program, such as potentially cannibalizing enrollment or, conversely,
  providing opportunities to leverage interdisciplinary assets, curricular synergies, and the pooling of
  resources.
  - o Other than what has been described above through stackability, there are no affected programs.
- Indicate any collaborative arrangements in place or planned to support the program, such as multicampus arrangements or inter-institutional agreements. Please provide details on estimated cost savings and/or other benefits in relation to (7.b.) above.
  - o There are no collaborative arrangements planned at this time.

# 8. External Letters of Support (Minimum of 5)

- List, by source, the five or more external letters received in support of the proposed degree program.
- The letters should address the strong workforce and/or societal need for graduates in this field of study, how the proposed curriculum aligns with current and future talent needs, and the various career opportunities for graduates, especially in Indiana. The Commission particularly values original letters from external stakeholders that were directly involved in the genesis and/or development of the proposed program, including those with formalized relationships with the institution, e.g., an employer advisory board or regular employer of interns or graduates. Ideal submitters will be impacted by the program's graduates, such as in-state employers (including local, state, or federal government), business and industry organizations, economic development entities, non-profit organizations, philanthropies, professional organizations, and graduate/professional schools.

Letter provider	Organization	Letter Summary
LTG(Ret) Karen Gibson	Business Owner, Member of	Letter expresses support from
	various Boards, Military Veteran,	her experience as a 30+ year
	and Federal leader	Soldier, 4 years as Federal
		Employee at the highest levels of
		federal government, and as a
		defense industrial base leader.
Maj Gen Lyle Drew	Department of Defense	As a leader of Joint Entity in the
		Department of Defense, this
		letter communicates the
		importance of education that
		transcends the services.
Dr. Rodney Miller	Defense Industrial Base	Senior leader within a Defense
		Industrial Base, this letter
		expresses the need for a well-
		developed workforce in the
		strategies needed to best employ
		emerging technologies.
Dr. Faith Grigg	Department of the Navy	Leads entirety of Warfighter
		Development for the U.S. Navy.
		The letter highlights the relevance
		of the program and importance of
		a degree that is priced at the DoD
		Tuition Assistance Rate.
RADM Mike Baker	Department of Defense	A leader of interagency and
		Foreign Area Officer Community,
		this letter expresses the critical
		nature of technology and the

		intersection of diplomacy, and the need for a skilled cadre of strategic thinkers in the realm of security and defense technologies.
WO Marc Muehling	Indiana Army National Guard	As the Education Service Officer for the Guard, this letter expresses the importance of this offering ushering in a new era of relevant professional military education and accessibility through affordability.
Mr. Kelvin Gumbs	Executive Director, Military Educational Partnerships, Purdue	As a 22-year Navy veteran, with strong understanding of Military and Veterans focused education, this letter highlights the appetite defense personnel have for affordable education in an environment of constrained fiscal resources.

<u>Appendix 12:</u> Letters of Support, Detail (This appendix should contain a minimum of five letters of support for the program.)

### **Appendices**

Appendix 1: Provide the list of occupations and occupational classifications relevant to the proposed degree program. Provide analyses of the most recent regional/Indiana job posting analytics



Figure 1. Military positions by Locations in the United States in 2023 (Lightcast, 2025).

## **Target Occupations**

\$35.52/hr 9,012 +8.1% \$73.9K/yr Jobs (2023)\* % Change (2023-2027)\* Median Earnings Annual Openings\* 38% below National average\* Nation: +5.9%\* Nation: \$43.25/hr; \$90.0K/yr 2023 Annual Median Growth (2023 -**Employment Concentration** Occupation Jobs\* 2027)\* Openings\* **Earnings** Project Management Specialists 2,584 245 \$40.28/hr +9.13% Managers, All Other 2,548 233 \$30.96/hr +6.79% 0.74 Business Operations Specialists, All Other 1,848 210 \$34.76/hr +9.74% 0.46 Compliance Officers \$31.66/hr +5.43% 0.75 921 86 Information Security Analysts 496 50 \$45.93/hr +15.12% 0.60 ➡ First-Line Supervisors of Police and Detectives 188 15 \$41.49/hr +3.72% 0.53 Detectives and Criminal Investigators 185 16 \$32.21/hr +3.24% 0.59 Emergency Management Directors 113 9 \$29.66/hr 0.00% 1.67

7

3

\$43.67/hr

\$24.20/hr

+3.88%

+3.70%

0.82

0.65

Figure 2. Homeland security labor market information for the State of Indiana (Lightcast, 2025).

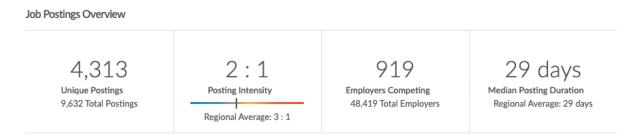
103

27

First-Line Supervisors of Firefighting and

Transportation Security Screeners

Prevention Workers



There were **9,632** total job postings for your selection from September 2021 to September 2023, of which **4,313** were unique. These numbers give us a Posting Intensity of **2-to-1**, meaning that for every 2 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (3-to-1), indicating that they are putting average effort toward hiring for this position.

Figure 3. Job postings overview for the State of Indiana (Lightcast, 2025).

## **Top Companies Posting**

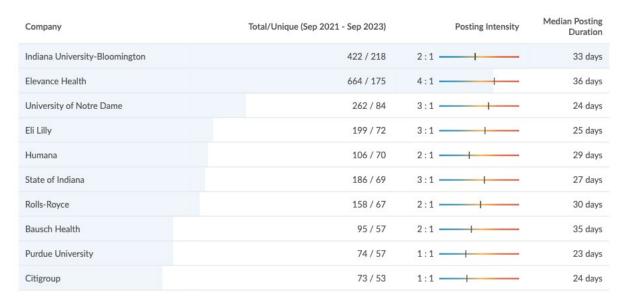


Figure 3. Top Indiana companies hiring for positions related to homeland security (Lightcast, 2025).



Figure 4. Top posted job titles for homeland security positions in Indiana (Lightcast, 2025).

#### **Target Occupations**

\*Filtered by the proportion of the national workforce in these occupations with a Master's degree

827,138 Jobs (2023)*	+5.9% % Change (2023-2027)*		\$43.25/hr \$90.0K/yr Median Earnings		75,729 Innual Openings*
Occupation		2023 Jobs*	Annual Openings*	Median Earnings	Growth (2023 - 2027)*
Project Management Specialists		231,188	20,022	\$47.30/hr	+5.99%
Business Operations Specialists, A	II Other	229,235	23,128	\$38.05/hr	+5.28%
Managers, All Other		197,390	17,317	\$50.55/hr	+5.32%
Compliance Officers		70,244	6,430	\$36.34/hr	+5.22%
Information Security Analysts		47,326	4,536	\$57.79/hr	+13.34%
First-Line Supervisors of Police an	d Detectives	20,250	1,599	\$48.92/hr	+4.10%
Detectives and Criminal Investigation	tors	18,100	1,577	\$43.80/hr	+4.03%
First-Line Supervisors of Firefighti	ing and Prevention Workers	7,161	540	\$41.45/hr	+4.89%
Emergency Management Director	s	3,866	322	\$40.37/hr	+4.53%
Transportation Security Screeners		2,378	258	\$24.05/hr	+4.75%

Figure 5. National occupations related to homeland security (Lightcast, 2025).

Top Posted Job Titles



There were **810,357** total job postings for your selection from September 2021 to September 2023, of which **341,532** were unique. These numbers give us a Posting Intensity of **2-to-1**, meaning that for every 2 postings there is 1 unique job posting.

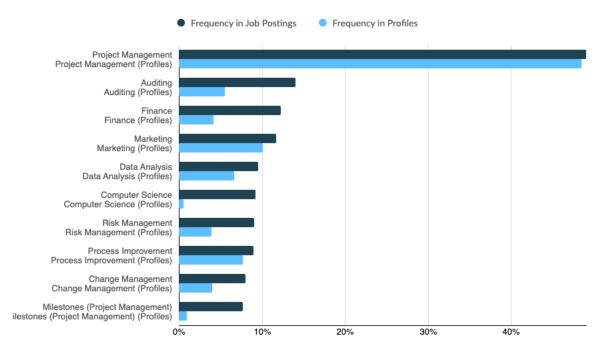
This is close to the Posting Intensity for all other occupations and companies in the region (3-to-1), indicating that they are putting average effort toward hiring for this position.

Figure 6. National job postings overview for homeland security (Lightcast, 2025).

#### Median Posting Job Title Total/Unique (Sep 2021 - Sep 2023) Posting Intensity Duration Project Managers 59,349 / 27,327 2:1 -27 days Program Managers 28,213 / 11,460 27 days 2:1 -Program Directors 14,531 / 5,395 3:1 -30 days **Program Coordinators** 14,031 / 5,160 3:1 30 days Technical Program Managers 8,861 / 3,958 2:1 22 days Regulatory Affairs Managers 7,475 / 3,460 2:1 -31 days **Project Coordinators** 7,053 / 2,717 3:1 -28 days Technical Project Managers 5,768 / 2,668 2:1 -25 days 6,712 / 2,499 3:1 28 days **Program Specialists** Regulatory Affairs Specialists 6,000 / 2,404 27 days 2:1 -

Figure 7. Top posted job titles related to homeland security in the United States (Lightcast, 2025).

## **Top Specialized Skills**



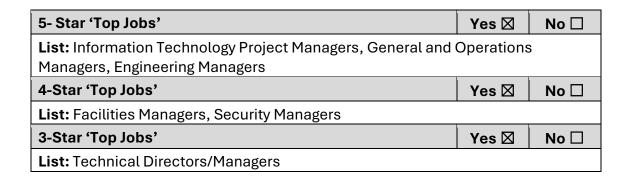
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles	Projected Skill Growth	Skill Growth Relative to Market
Project Management	167,584	49%	1,311,538	48%	+19.8%	Rapidly Growing
Auditing	48,069	14%	149,982	6%	+21.8%	Rapidly Growing
Finance	42,064	12%	113,522	4%	+27.3%	Rapidly Growing
Marketing	40,037	12%	273,467	10%	+23.0%	Rapidly Growing
Data Analysis	32,647	10%	181,241	7%	+25.8%	Rapidly Growing
Computer Science	31,510	9%	15,468	1%	+26.8%	Rapidly Growing
Risk Management	30,915	9%	106,665	4%	+26.2%	Rapidly Growing
Process Improvement	30,845	9%	208,752	8%	+27.0%	Rapidly Growing
Change Management	27,406	8%	108,024	4%	+23.2%	Rapidly Growing
Milestones (Project Management)	26,465	8%	26,555	1%	+20.8%	Rapidly Growing

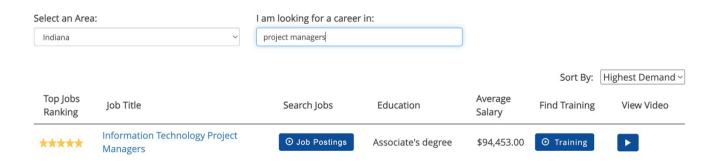
Figure 8. Top posted job skills in the homeland security labor market in the United States (Lightcast, 2025).

Qualification	Postings with Qualification
Project Management Professional Certification	47,333
Master Of Business Administration (MBA)	44,064
Valid Driver's License	28,585
Security Clearance	13,530
Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)	12,705
Certified Information Systems Security Professional	11,287
Project Management Certification	7,578
Secret Clearance	7,291
Certified Information System Auditor (CISA)	6,948
Professional Engineer (PE) License	5,658

Figure 9. Top posted qualifications for homeland security positions in the United States (Lightcast, 2025).

Appendix 2: In addition to the narrative and questions above for (3.f.), provide a summary of Indiana DWD data and 'Top Jobs' occupational rankings, U.S. BLS data, O\*NET data, proprietary tools like Lightcast or Gray DI, etc. (This appendix should contain the detailed tables addressing occupation/occupational-specific details as well as applicable industry sector(s) projections on percentage growth, relative growth to average occupational growth, and the absolute employment change, upon which the narrative summary of future labor market demand is based including Indiana-specific information and/or relevant pages from the analyses.)





#### Select an Area: I am looking for a career in: managers Indiana Sort By: Highest Demand ~ Top Jobs Average Find View Job Title Search Jobs Education Ranking Training Video Salary Architectural and ⊙ Training **⊙** Job Postings \$147,784.00 \*\*\*\* Bachelor's degree **Engineering Managers** Biofuels/Biodiesel \*\*\*\* Technology and Product **⊙** Job Postings Bachelor's degree \$147,784.00 **⊙** Training **Development Managers Brownfield Redevelopment ⊙** Job Postings \$94,224.00 **⊙** Training Specialists and Site Associate's degree \*\*\*\* Managers **⊙** Training Clinical Data Managers **⊙** Job Postings Bachelor's degree \$92,518.00 \*\*\*\* \*\*\*\* **Compliance Managers ⊙** Job Postings Associate's degree \$94,224.00 **⊙** Training Computer and Information ⊙ Training \*\*\*\* **⊙** Job Postings Bachelor's degree \$139,568.00 Systems Managers **⊙** Job Postings \$135,845.00 **⊙** Training \*\*\*\* **Financial Managers** Bachelor's degree **General and Operations ⊙** Training \*\*\*\* **⊙** Job Postings Associate's degree \$129,542.00 Managers Information Technology **⊙** Job Postings \$94,453.00 **⊙** Training Associate's degree \*\*\*\* **Project Managers**

****	Facilities Managers	<b>⊙</b> Job Postings	Associate's degree	\$98,176.00		
****	Farmers, Ranchers, and Other Agricultural Managers	<b>⊙</b> Job Postings	Post-secondary certificate or some college courses	\$60,775.00	<b>⊙</b> Training	<b>•</b>
****	Food Service Managers	<b>⊙</b> Job Postings	Post-secondary certificate or some college courses	\$63,794.00	<b>⊙</b> Training	
****	Geothermal Production Managers	<b>⊙</b> Job Postings	Associate's degree	\$110,198.00	⊙ Training	
****	Human Resources Managers	<b>⊙</b> Job Postings	Bachelor's degree	\$130,541.00	<b>⊙</b> Training	
****	Hydroelectric Production Managers	<b>⊙</b> Job Postings	Associate's degree	\$110,198.00	<b>⊙</b> Training	
****	Industrial Production Managers	<b>⊙</b> Job Postings	Associate's degree	\$110,198.00	<b>⊙</b> Training	
****	Marketing Managers	<b>⊙</b> Job Postings	Associate's degree	\$131,622.00	① Training	<b>•</b>
****	Natural Sciences Managers	<b>⊙</b> Job Postings	Bachelor's degree	\$98,904.00	<b>⊙</b> Training	<b>•</b>
****	Property, Real Estate, and Community Association Managers	O Job Postings	Post-secondary certificate or some college courses	\$67,829.00	<b>⊙</b> Training	
****	Public Relations Managers	<b>⊙</b> Job Postings	Bachelor's degree	\$115,627.00	<b>⊙</b> Training	
****	Purchasing Managers	<b>⊙</b> Job Postings	Bachelor's degree	\$120,390.00	<b>⊙</b> Training	<b>•</b>
****	Quality Control Systems Managers	<b>⊙</b> Job Postings	Associate's degree	\$110,198.00	<b>⊙</b> Training	<b>•</b>
****	Security Managers	<b>⊙</b> Job Postings	Associate's degree	\$98,176.00	<b>⊙</b> Training	
****	Technical Directors/Managers	<b>⊙</b> Job Postings	Bachelor's degree	\$56,222.00	<b>⊙</b> Training	<b>&gt;</b>

Figure 10. Relevant 5-, 4-, and 3-star jobs in Indiana according to the <u>Indiana Department of Workforce Development</u>.



Table 1.3 Fastest growing occupations, 2023 and projected 2033 (Numbers in thousands)

2023 National Employment Matrix title	2023 National Employment Matrix code	Employment, 2023	Employment, 2033	Employment change, numeric, 2023-33	Employment change, percent, 2023-33	Median annual wage, dollars, 2024[1]
Total, all occupations	00-0000	167,849.8	174,589.0	6,739.2	4.0	49,500
Wind turbine service technicians	49-9081	11.4	18.2	6.8	60.1	62,580
Solar photovoltaic installers	47-2231	25.0	37.0	12.0	48.0	51,860
Nurse practitioners	29-1171	292.5	427.9	135.5	46.3	129,210
Data scientists	15-2051	202.9	276.0	73.1	36.0	112,590
Information security analysts	15-1212	180.7	239.8	59.1	32.7	124,910

Figure 11. Fastest growing occupations according to the <u>Bureau of Labor Statistics</u>. Information Security Analysts is the most relevant, top-growing role for program graduates.

Appendix 3: Provide a summary of wage data for graduates from similar programs at peer institutions and/or wages by experience level for the relevant occupations identified under (3.e.), citing authoritative sources such as the U.S. Census Bureau's Post-Secondary Employment Outcomes (PSEO) data, the PSEO Coalition's 'Living Wage vs. Postsecondary Graduate Earnings' by certificate level, Indiana DWD and 'Top Jobs', the MIT 'Living Wage Calculator' for Indiana and region, U.S. Department of Education's College Scorecard, the New York Federal Reserve's labor market data for recent college graduates, Indiana DWD, U.S. BLS, Lightcast, other proprietary tools, etc. (This appendix should contain tables upon which the above estimates are based upon and/or relevant pages from the analyses.)

# Percentile Earnings

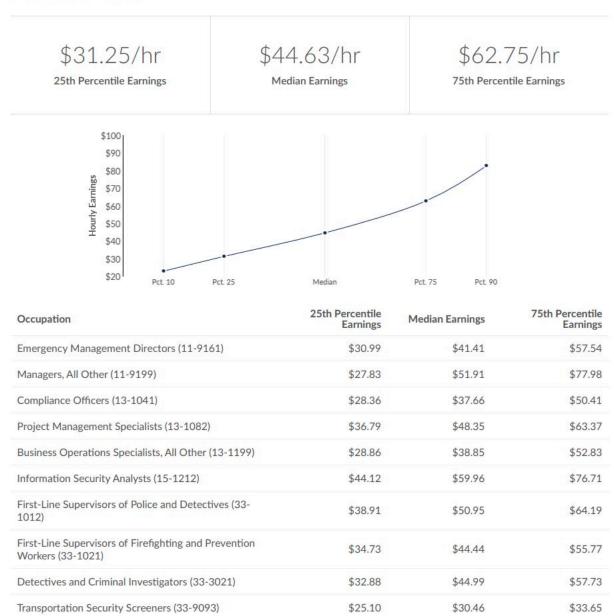


Figure 12. Earnings for Homeland Security at the 25th, 50th, and 75th percentile.

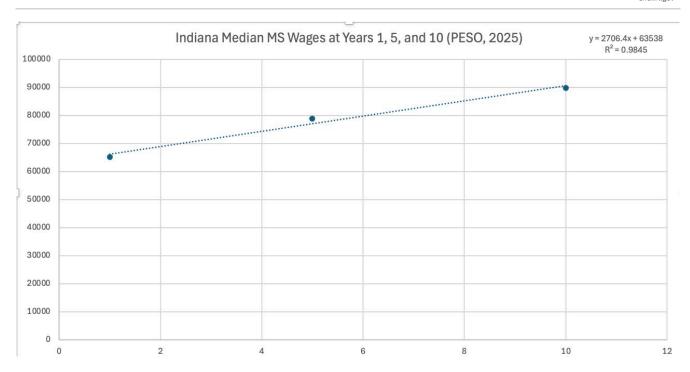


Figure 13. **30-year data from the PESO Coalition in Indiana.** Wage data was available for individuals with a M.S. at years 1, 5, and 10. Data were imported into an Excel chart to generate an equation:  $y=$2,706.4x + $63,538 (R^2=0.985)$ . Data at years 3, 20, and 30 are inferences using the linear function.

<u>Appendix 4:</u> In addition to the above narrative analysis, include authoritative data tables demonstrating student interest and demand, such as web traffic and search engine analytics and student surveys. Save the details for specific enrollment projections for (5.c.). (This appendix should contain graphs/tables, relevant pages from analyses, and/or links to cited sources.)

Keyword Cluster	Search Volume
Security	7,300
Military	930
Strategy	350
Defense	190
War	90
Combined Total	8,860

Figure 14. Search volume analytics for terms in Google, within the context of education, relating to the program's keywords. The full search volume analytics spreadsheet can be accessed <u>here</u>.

<u>Appendix 5:</u> In addition to a narrative analysis above, include the most recent data for the applicable programs' completions, growth trends, and market share data, such as the most recent IPEDS or Lightcast data. (This appendix should contain graphs/tables, relevant pages from the analyses, and/or links to cited sources.)

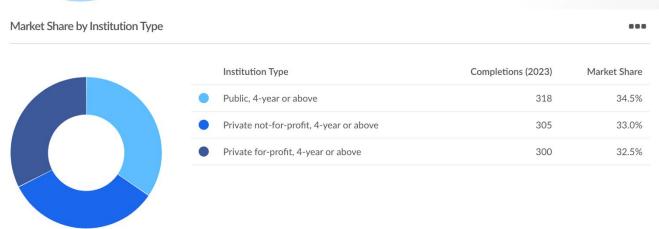


Figure 15. Conferral data for homeland security programs (CIP 43.0301) (Lightcast, 2025).

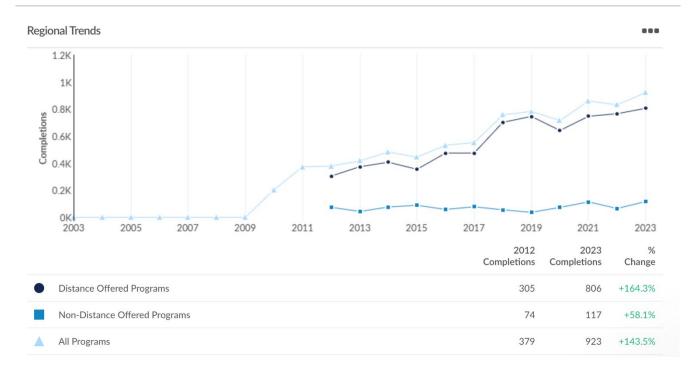


Figure 16. Conferral trends for homeland security (CIP 43.0301) (Lightcast, 2025).

Appendix 7: Degree Maps by Each of the Specified Student Populations, Detail (This appendix should contain the semester-by-semester, course-level detail on the program curriculum, including how long it will take to complete the program, assuming full-time or part-time study, as applicable.)

Students must already have a B.S to be admitted into the program; therefore, there are only two pathways exist at this time: part-time and full-time enrollment. Course offerings vary by term. The tables below show examples of how full-time and part-time students could matriculate through the program.

# Part Time

Term 1	Term 2	Term 3	Term 4	Term 5
SCLA 50500	SCLA 53000	SCLA XXXXX	SCLA XXXXX (Ethical	SCLA XXXXX
		(Legislative Policy &	Reasoning &	(Capstone)
		Defense Technology)		
		Technologies)		
SCLA 50700	Selective Core #1	Elective #1	Selective Core #2	Elective #2

## Full Time

- att inno		
Term 1	Term 2	Term 3
SCLA 50500	SCLA XXXXX (Legislative Policy &	SCLA XXXXX (Capstone)
	Defense Technologies)	
SCLA 50700	SCLA 53000	Elective #1
Selective Core #1	Selective Core #2	Elective #2
	SCLA XXXXX (Ethical Reasoning &	
	Technology)	

<u>Appendix 8:</u> Articulation of Associate/Baccalaureate Programs, Detail (This appendix should contain the actual articulation agreements relevant to the proposed program. Prior to submitting the program proposal to the Commission, universities should work directly with Ivy Tech Community College and Vincennes University to develop articulation agreements that maximize transfer opportunities for students.)

## Does not apply.

Appendix 9: Operating Cost Budgeting Estimates (This appendix should contain budgeting estimates and the per student cost. Comparisons to similar degree programs at other state educational institutions should draw from the Commission's 'Data Accountability and Transparency Dashboard' under IC 21-14-15-1.)



#### **MS Strategic Defense Technologies**

	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
Revenue	\$ 32,850	\$ 394,199	\$ 733,648	\$ 919,797	\$ 1,149,747	\$ 1,368,746
Course Production	\$38,500	\$35,586	\$36,654	\$37,754	\$38,886	\$40,053
Instructional Costs	\$138,720	\$162,417	\$184,910	\$198,523	\$214,775	\$230,476
Student Acquisition	\$159,335	\$180,440	\$185,513	\$191,186	\$196,902	\$202,664
Student Support	\$12,188	\$32,245	\$44,496	\$51,355	\$59,727	\$67,735
Fees	\$8,858	\$106,293	\$197,824	\$248,018	\$310,023	\$369,075
Residual	(\$324,751)	(\$122,782)	\$84,250	\$192,962	\$329,434	\$458,743
Cumulative Residual	(\$324,751)	(\$447,533)	(\$363,283)	(\$170,321)	\$159,113	\$617,856

Total 6-year revenue: \$4,598,987

Total 6-year cost-to-operate: \$3,981,132

Total 6-year new student starts: 495

Total Cost-to-Operate: \$8,043

Cost-per-student to operate the program = \$4,727,191/825 = \$5,730/student



From ICHE HEA dashboard.

<u>Appendix 10:</u> Faculty and Staff, Detail (This appendix should contain a list of faculty with appointments to teach in the program and a brief description of new faculty positions yet to be filled.)

- Sorin Matei, Associate Dean of Research and Graduate Education, Professor
- <u>Robert Kirchubel</u>, Outreach Director of the FORCES Initiative, History Instructor
- Lamont Collucci, Limited Term Lecturer
- Rick Whitman, Limited Term Lecturer
- Susan Goodwin, Limited Term Lecturer
- <u>Bert Chapman</u>, Professor
- Alex Psomas, Assistant Professor
- Kira Graves, Faculty Affiliate for FORCES, Limited Term Lecturer

<u>Appendix 11:</u> Capital Costs, Detail. (If necessary, this appendix should contain additional information on capital costs to successfully launch and deliver the proposed program.)

## Does not apply.

<u>Appendix 12:</u> Letters of Support, Detail (This appendix should contain a minimum of five letters of support for the program.)