McKenzie Center for Innovation & Technology
2023 - 2024 Curriculum Guide

"Where Everything Is Possible."

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Available to students from Lawrence Central and Lawrence North, the McKenzie Center for Innovation and Technology houses state-of-the-art equipment and materials in the classrooms and labs. The Center embraces postsecondary-ready competencies though rigorous academic programs and diverse technological courses. McKenzie prepares students for career opportunities and post-secondary education at: two and four-year colleges, military service, workplace entry, advanced technical training in a variety of businesses, medical, and industrial fields. The low teacher-student ratio, nurturing environment, innovative technology, and broad array of career programs, dual-credited courses, and national certifications are continually cited as advantages by McKenzie students.

***Perkins V (PV) is applicable to the class of 2024, while the new Next Level of Programs (NLPS) curriculum is typically applicable to the classes of 2025, 2026, and beyond.**

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Agriculture, Food, & Natural Resources: Agriculture Science – Plants & Animals

7117 Principles of Agriculture (NLPS)

Principles of Agriculture is a two-semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective credits for all diplomas
- Dual Credit Pending

Architecture & Construction: Construction Trades – Carpentry

7130 Principles of Construction Trades (NLPS)

Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic safety. Additionally students will study the roles of individuals and companies within the construction industry and reinforce mathematical and communication skills necessary to be successful in the construction field.

- Grade(s): 10
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7123 Construction Trades: General Carpentry (NLPS)

General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems. 228

- Grade(s): 11
- 2 Block Course: 1st Block – General Carpentry, 2nd Block – Framing and Finishing
- Required Prerequisites: Principles of Construction Trades
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7122 Construction Trades: Framing and Finishing (NLPS)

Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

- Grade(s): 11
- 2 Block Course: 1st Block -- General Carpentry, 2nd Block – Framing and Finishing
- Required Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7242 Construction Trades Capstone (NLPS)

The Construction Trades Capstone course covers the basics of electricity and working with concrete. Electrical topics include the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. Students may also gain an understanding of concrete properties, foundations, slab-on-grades, and vertical and horizontal formwork. The course prepares students for the NCCER Carpentry Forms Level 3 and Electrical Level 1 certificates.

- Grade(s): 12
- 2 Block Course: 1st Block – Construction Trades, 2nd Block – Construction Trades
- Required Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry; and Construction Trades: Framing and Finishing
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Counts as a quantitative reasoning course
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

Arts, AV Tech, & Communications: Digital Design

5550 Graphic Design and Layout (NLPS & PV)

Graphic Design and Layout teaches design process and the proper and creative use of type as a means to develop effective communications for global, corporate and social application. Students will create samples for a portfolio, which may include elements or comprehensive projects in logo, stationery, posters, newspaper, magazine, billboard, and interface design.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Digital Design; Digital Design Graphics
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7138 & 5232 Interactive Media Design (NLPS -7138 & PV - 5232)

Interactive Media Design focuses on the tools, strategies, and techniques for interactive design and emerging technologies, like web and social media. Students will learn the basics of planning, shooting, editing and post-producing video and sound. Additionally, students will explore the process of integrating text, graphics, audio and video for effective communication of information.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Digital Design; Digital Design Graphics
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7246 Digital Design Capstone (NLPS)

The Digital Design Capstone course provides students the opportunity to dive deeper into advanced concepts of Visual Communication including user experience/user interface design, video production editing, animation and/or web design. Depending on the length of the course, students may focus their efforts on one area or explore multiple aspects.

- Grade(s): 12
- Required Prerequisites: Principles of Digital Design; Digital Design Graphics; Graphic Design & Layout or Interactive Media
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas
- Dual Credit Pending

Business Management, Marketing, & Finance: Accounting

4562 Principles of Business Management (NLPS)

Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

4524 Accounting Fundamentals (NLPS)

Accounting Fundamentals introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.

- Grade(s): 10, 11
- Required Prerequisites: Principles of Business Management
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

4522 Advanced Accounting (NLPS & PV)

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for various forms of business ownership using double-entry accounting covered in Accounting Fundamentals, including an emphasis on payroll accounting. Topics covered include calculating gross pay, withholdings, net pay, direct deposits, journalizing payroll transactions and preparing individual earnings records and payroll registers. Emphasis is placed on applying Generally Accepted Accounting Principles through hands-on practice with popular commercial accounting software packages that are currently used in business.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management; Accounting Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
- Dual Credit Pending

7252 Accounting Capstone (NLPS)

The Accounting Capstone course will emphasize Managerial Accounting concepts and Income Tax Accounting for individuals and sole proprietorships. Topics include general versus cost accounting systems, cost behavior, cost-volume profit analysis, budgeting, standard cost systems, responsibility accounting, incremental analysis, and capital investment analysis. Offers an overview of federal and state income tax law for individuals including taxable income, capital gains and losses, adjustments, standard and itemized deductions, tax credits and appropriate tax forms. When offered for multiple credits per semester, the Accounting Capstone may be used to provide students the opportunity to participate in an intensive work-based learning experience and/or to complete additional coursework in using spreadsheets to solve accounting cases and to complete a postsecondary credential from ITCC or VU.

- Recommended Grade(s): 12
- Required Prerequisites: Principles of Business Management; Accounting Fundamentals; Advanced Accounting
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Counts as a quantitative reasoning course

- Dual Credit Pending

Business Management, Marketing, & Finance: Business Administration

4562 Principles of Business Management (NLPS)

Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7143 Management Fundamentals (NLPS)

Management Fundamentals describes the functions of managers, including the management of activities and personnel. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.

- Grade(s): 10, 11
- Required Prerequisites: Principles of Business Management
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

4524 Accounting Fundamentals (NLPS & PV)

Accounting Fundamentals introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management, Management Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

Business Management, Marketing, & Finance: Entrepreneurship

7154 Principles of Entrepreneurship (NLPS)

Principles of Entrepreneurship focuses on students learning about their own strengths, character and skills and how their unique abilities can apply to entrepreneurship, as well as how an entrepreneurial mindset can serve them regardless of their career path. Students will learn about the local, regional and state resources and will begin to understand and apply the entrepreneurial process. The course helps students to identify and evaluate business ideas while learning the steps and competencies required to launch a successful new venture. The course helps students apply what they have learned from the content when they write a Personal Vision Statement, a Business Concept Statement, and an Elevator Pitch.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7148 New Venture Development (NLPS)

Venture Development is targeted to students interested in creating and growing their own businesses. The course will focus on key marketing strategies particularly relevant for new ventures. Students will apply marketing concepts to entrepreneurial company challenges, which include creating and nurturing relationships with new customers, suppliers, distributors, employees and investors; and understand the special challenges and opportunities involved in developing marketing strategies "from the ground up."

- Grade(s): 10, 11
- Required Prerequisites: Principles of Entrepreneurship
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7147 Small Business Operation (NLPS)

Small Business Operations will help students identify and evaluate the various sources available for funding a new enterprise; demonstrate an understanding of financial terminology; read, prepare, and analyze basic financial statements; estimating capital requirements and risk, and prepare a budget for their business, including taxes and personnel costs. In addition, the student should be able to explain the importance of working capital and cash management. The student should also be able to identify financing needs, and prepare sales forecasts.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Entrepreneurship; New Venture Development
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

Business Management, Marketing, & Finance: Marketing & Sales

4562 Principles of Business Management (NLPS)

Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

5914 Marketing Fundamentals (NLPS & PV)

Marketing Fundamentals provides a basic introduction to the scope and importance of marketing in the global economy. Course topics include the seven functions of marketing: promotion, channel management, pricing, product/service management, market planning, marketing information management, and professional selling skills. Emphasis is marketing content but will involve use of oral and written communications, mathematical applications, problem-solving, and critical thinking skills through the development of an integrated marketing plan and other projects.

- Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Business Management
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7145 Digital Marketing (NLPS)

Digital Marketing provides an introduction to the world of e-commerce and digital marketing media. The course covers how to integrate digital media and e-commerce into organizational and marketing strategy. Students will explore e-commerce applications and the most popular digital marketing tactics and tools. Emphasizes familiarity with executing digital media, understanding the marketing objectives that digital media can help organizations achieve, and establishing and enhancing an organization's digital marketing presence.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management; Marketing Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7201 Business Management Capstone (NLPS)

The Business Management Capstone is designed to provide any student with the Business Management skills necessary to run their own business or to serve in upper level management. Students will explore Management Theory, Accounting, and Business Law. The Business Management Capstone can be used with any career pathway except Business Administration. Completion of the course may allow students the opportunity to earn a CT or TC through ITCC.

- Recommended Grade(s): 12
- Required Prerequisites: Principles of Business Management; Marketing Fundamentals; Digital Marketing
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Dual Credit Pending

Business Management, Marketing, & Finance: Additional Perkins V Courses

4562MF Principles of Business Management/BUSN 101 (IT) – (PV)

Principles of Business Management focuses on the roles and responsibilities of managers, as well as, opportunities and challenges of ethically managing a business in the free-enterprise system. Students will attain an understanding of management, team building, leadership, problem-solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized.

- Grade(s): 12
- Required Prerequisites: none
- Credits: 2 Semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

4562KF Principles of Business Management/BUS X100 (IU) – (PV)

Business administration from the standpoint of the manager of a business firm operating in the contemporary economic, political, and social environment. ACP Bus X100 Business Administration: Introduction

- Grade(s): 12
- Required Prerequisites: none
- Credits: 2 Semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through IU Kelly School of Business

5918 Strategic Marketing (PV)

Strategic Marketing builds upon the foundations of marketing and applies the functions of marketing at an advanced level. Students will study the basic principles of consumer behavior and examine the application of theories from psychology, social psychology, and economics. The relationship between consumer behavior and marketing activities will be reviewed.

- Grade(s): 12
- Required Prerequisites: Marketing Fundamentals
- Credits: 2 semester course, 2 semesters required, 1-2 credits per semester, 4 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

5974 Work Based Learning Capstone (PV)

Work-based Learning Capstone is an instructional strategy that can be implemented as a standalone course or a component of any CTE course that prepares students for college and career. This strategy builds individual students' skills and knowledge within the area of interest. A standards based training plan is developed by the student, teacher, and workplace mentor to guide the student's work based learning experiences and assist in evaluating progress and performance, whether WBL is a standalone course or a component of a discipline-specific CTE course. **Must be paired with Strategic Marketing. The student must provide his/her own transportation to and from job situations and be willing to work a minimum of fifteen hours per week**.

- Grade(s): 12
- Credits: 2 Semester course; 1 - 3 credits per semester; maximum of 6 credits
    - 5974MA (1 Block)
    - 5974MB (2 Blocks)
    - 5974MC (3 blocks)
- Counts as a directed elective or elective for all diplomas

Health Science: Biomedical Science

5218 Principles of Biomedical Sciences (NLPS)

Principles of the Biomedical Sciences provides an introduction to this field through "hands-on" projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. NOTE: This course aligns with the PLTW Principles of Biomedical Sciences curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

- Grade(s): 9, 10
- Required Prerequisites: Biology I or concurrent enrollment in Biology I is required
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diplomas
- Dual Credit Pending

5216 Human Body Systems (NLPS)

Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions. NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

- Recommended Grade(s): 10, 11
- Required Prerequisites: Principles of Biomedical Sciences
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diplomas
- Dual Credit Pending

5217 Medical Interventions (NLPS & PV)

Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning High School Course Titles and Descriptions 2022-2023 300 approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. NOTE: This course aligns with the PLTW Medical Interventions curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Biomedical Sciences; Human Body Systems
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diploma types
- Dual Credit Pending

5219 Biomedical Innovations (NLPS & PV)

Biomedical Innovation is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st Century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. Students have the opportunity to work on an independent project and may work with a mentor or advisor from a healthcare or postsecondary industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. NOTE: This course aligns with the PLTW Biomedical Innovations curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

- Grade(s): 12
- Required Prerequisites: Principles of Biomedical Sciences; Human Body Systems or Anatomy and Physiology; Medical Interventions
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

Health Science: Certified Medical Assistant

7168 Principles of Healthcare (NLPS)

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

- Grade(s): 11
- 2 Block Course: 1st Block – Principles of Healthcare, 2nd Block – Medical Terminology
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

5274 Medical Terminology (NLPS)

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and High School Course Titles and Descriptions 2022-2023 301 medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

- Grade(s): 11
- 2 Block Course: 1st Block – Principles of Healthcare, 2nd Block – Medical Terminology
- Required Prerequisites: Principles of Healthcare
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7164 Certified Clinical Medical Assistant (NLPS)

The Certified Clinical Medical Assistant course will prepare students for the National Healthcare Association CCMA exam. Instruction includes taking and recording vital signs, preparing patients for examination, patient education, and assisting the physician during the exam. The collecting and preparation of laboratory specimens and basic laboratory tests will be covered. Prepares for the administration of medication, venipuncture, ECG, and wound care. Provides a basic understanding of the clinical and administrative duties and responsibilities pertinent to medical offices. Includes instruction in medical correspondence and records, case histories of patients, filing, telephone procedures, appointment scheduling, receptionist duties, and processing mail. Written, verbal and nonverbal communications according to patient needs are covered as well as documentation and associated legal and ethical boundaries.

- Grade(s): 12
- 3 Block Course: 1st Block – Certified Medical Assistant, 2nd Block – Healthcare Specialist, 3rd Block – Healthcare Specialist
- Required Prerequisites: Principles of Healthcare; Medical Terminology
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7255 Healthcare Specialist Capstone (NLPS)

The capstone course will provide Healthcare students with additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor's offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications.

- Grade(s): 12
- 3 Block Course: 1st Block – Certified Medical Assistant, 2nd Block – Healthcare Specialist, 3rd Block – Healthcare Specialist
- Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas
- Dual Credit Pending

Health Science: Pre-Nursing/Certified Nursing Aide (CNA)

7168 Principles of Healthcare (NLPS)

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

- Grade(s): 11
- 2 Block Course: 1st Block – Principles of Healthcare, 2nd Block – Medical Terminology
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

5274 Medical Terminology (NLPS)

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and High School Course Titles and Descriptions 2022-2023 301 medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

- Grade(s): 11
- 2 Block Course: 1st Block – Principles of Healthcare, 2nd Block – Medical Terminology
- Required Prerequisites: Principles of Healthcare
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

7166 Healthcare Specialist - CNA (NLPS)

The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

- Grade(s): 12
- 3 Block Course: 1st Block – Healthcare Specialist CNA, 2nd Block – Healthcare Specialist, 3rd Block – Healthcare Specialist
- Required Prerequisites: Principles of Healthcare; Medical Terminology
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7255 Healthcare Specialist Capstone (NLPS)

The capstone course will provide Healthcare students with additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor's offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications.

- Grade(s): 12
- 3 Block Course: 1st Block – Healthcare Specialist CNA, 2nd Block – Healthcare Specialist, 3rd Block – Healthcare Specialist
- Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas
- Dual Credit Pending

Hospitality & Tourism: Culinary Arts

7171 Nutrition (NLPS)

Nutrition students will learn the characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient dense meals or examining nutritional needs of student athletes.

- Grade(s): 10, 11
- 2 Block Course: 1st Block - Nutrition , 2nd Block – Culinary Arts
- Required Prerequisites: Principles of Culinary and Hospitality
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7169 Culinary Arts (NLPS)

Culinary Arts teaches students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

- Grade(s): 10, 11
- 2 Block Course: 1st Block - Nutrition , 2nd Block – Culinary Arts
- Required Prerequisites: Principles of Culinary and Hospitality; Nutrition
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7233 Culinary Arts Capstone (NLPS)

This course covers the techniques and skills needed in breakfast cookery as well as insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes and appetizers. This course also covers the necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

- Grade(s): 11, 12
- 3 Block Course
- Required Prerequisites: Principles of Culinary and Hospitality; Nutrition; Culinary Arts
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas
- Dual Credit Pending

Human Services: Barbering

7330 Principles of Barbering and Cosmetology (NLPS)

Principles of Cosmetology offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Grade(s): 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.
- Dual Credit Pending

7331 Barbering and Cosmetology Fundamentals (NLPS)

Barbering and Cosmetology Fundamentals focuses on the development of practical skills introduced in Principles of Barbering and Cosmetology. Clinical application and theory in the science of barbering and cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Grade(s): 11
- 3 Block Course: 1st Block – Barbering & Cosmetology Fundamentals, 2nd Block – Advanced Barbering, 3rd Block – Technical Skills Development
- Required Prerequisites: Principles of Barbering and Cosmetology
- Credits: Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Principles and Fundamentals should be concurrently enrolled. This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.
- Dual Credit Pending

7333 Advanced Barbering (NLPS)

Advanced Barbering is a course with a focus particularly on barbering styles and techniques. The emphasis will be toward the development of advanced skills in styling, hair coloring, permanent waving, facials and facial hair care. Students will also study anatomy and physiology as it applies to cosmetology. Upon completion of the course requirements, the students will be able to perform basic manipulative skills including haircutting, hairstyling, perming, and shaving, treatment of the skin and scalp, salon management, license laws, sanitation and retain knowledge relating to the history of barbering. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Grade(s): 11
- 3 Block Course: 1st Block – Barbering & Cosmetology Fundamentals, 2nd Block – Advanced Barbering, 3rd Block – Technical Skills Development
- Required Prerequisites: Principles of Barbering & Cosmetology; Barbering & Cosmetology Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course should be co-enrolled with TSD. This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.
- Dual Credit Pending

7156 Technical Skills Development (NLPS)

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Grade(s): 10, 11, 12
- 3 Block Course: 1st Block – Barbering & Cosmetology Fundamentals, 2nd Block – Advanced Barbering, 3rd Block – Technical Skills Development
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study

5806 Barbering II (PV)

A two-year course designed for students to complete 1,500 hours of combined theory and intensive laboratory applications required for the State of Indiana Barbering License. This course provides an introduction to the barbering profession with an emphasis on basic practical skills and theories including the history of barbering, life skills, professional image, basics of chemistry and electricity, business skills, and the practice of barbering. When students successfully follow the prescribed curriculum and complete laboratory hours, they may take the State of Indiana board exam for Barbering and obtain a license to work in a shop.

- Grade(s): 12
- 3 Block Course
- Required Prerequisites: Successful completion of Barbering I
- Credits: 2 Semester course; 3 credits per semester
- Additional one credit per semester earned with Work Based Learning Capstone (5974F3 and 5974S3)
- Counts as directed elective or elective for all diplomas
- Dual Credit Pending

Human Services: Cosmetology

7330 Principles of Barbering and Cosmetology (NLPS)

Principles of Cosmetology offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Grade(s): 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.
- Dual Credit Pending

7331 Barbering and Cosmetology Fundamentals (NLPS)

Barbering and Cosmetology Fundamentals focuses on the development of practical skills introduced in Principles of Barbering and Cosmetology. Clinical application and theory in the science of barbering and cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Grade(s): 11
- 3 Block Course: 1st Block – Barbering & Cosmetology Fundamentals, 2nd Block – Advanced Cosmetology, 3rd Block – Technical Skills Development
- Required Prerequisites: Principles of Barbering and Cosmetology
- Credits: Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Principles and Fundamentals should be concurrently enrolled. This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.
- Dual Credit Pending

7332 Advanced Cosmetology (NLPS)

Advanced Cosmetology will emphasize the development of advanced skills in styling, hair coloring, permanent waving, facials, manicuring, chemical texturizing, and hair cutting techniques. Students will also further study anatomy and physiology as it applies to hair care professions. Successful completion of the course requires at least 375 studio hours.

- Recommended Grade(s): 11
- 3 Block Course: 1st Block – Barbering & Cosmetology Fundamentals, 2nd Block – Advanced Cosmetology, 3rd Block – Technical Skills Development
- Required Prerequisites: Principles of Barbering and Cosmetology; Barbering and Cosmetology Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course should be co-enrolled with TSD. This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.
- Dual Credit Pending

7156 Technical Skills Development (NLPS)

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Grade(s): 10, 11, 12
- 3 Block Course: 1st Block – Barbering & Cosmetology Fundamentals, 2nd Block – Advanced Cosmetology, 3rd Block – Technical Skills Development
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study

5806 Cosmetology II (PV)

Cosmetology II builds on concepts learned in Cosmetology I with an emphasis on the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology.

- Grade(s): 12
- 4 Block Course
- Required Prerequisites: Successful completion of Cosmetology I
- Credits: 2 Semester course, 3 credits per semester
- Additional one credit per semester earned with Work Based Learning Capstone (5974F1 and 5974S2)
- Requirement: $265 non-refundable equipment fee
- Counts as directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

Information Technology: Computer Science

7183 Principles of Computing (NLPS)

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7351 Topics in Computer Science (NLPS)

Topics in Computer Science is designed for students to investigate emerging disciplines within the field of computer science. Students will use foundational knowledge from 7183 Principles of Computing to study the areas of data science, artificial intelligence, app/game development, and security. Students will utilize knowledge related to these areas and programming skills to develop solutions to authentic problems.

- Grade(s): 10, 11
- Required Prerequisites: Principles of Computing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Counts as a quantitative reasoning course
- Counts as a science credit
- Dual Credit Pending

7352 Computer Science (NLPS)

Computer Science introduces the fundamental concepts of procedural programming. Topics include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. The course also offers an introduction to the historical and social context of computing and an overview of computer science as a discipline.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Topics in Computer Science
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Counts as a science credit
- Counts as a quantitative reasoning course
- Dual Credit Pending

Information Technology: Cybersecurity

7183 Principles of Computing (NLPS)

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7179 Cybersecurity Fundamentals (NLPS)

This course introduces fundamental networking protocols and their hierarchical relationship in the context of conceptual Information Communication Technology (ICT) frameworks. Students will learn how networked hosts and applications communicate across networks. Emphasis is placed on security throughout the entire SDLC (Systems Development Life Cycle).

- Grade(s): 10, 11
- Required Prerequisites: Principles of Computing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7178 Advanced Cybersecurity (NLPS)

Students will acquire the fundamentals of information and data security and understand the vulnerability most organizations have in their security systems with an emphasis on firewalls, security plans and Virtual Private Networks (VPNs). Discussions will include data security methods, authentication, network attacks, malicious code and viruses, wireless security, e-mail and web security and disaster recovery. This course will also focus on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts, such as security planning and contingencies, security policies, security management models and practices and ethics.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Cybersecurity Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

Information Technology: Information Technology Operations

7183 Principles of Computing (NLPS)

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7180 Information Technology Fundamentals (NLPS)

Information Technology Fundamentals provides the necessary competencies required for an entry-level Information Technology professional. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Students will also learn appropriate customer support, understand the basics of virtualization, desktop imaging, and deployment. This course should also prepare students for the CompTia A+ Certification Exam.

- Grade(s): 10, 11
- Required Prerequisites: Principles of Computing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7181 Networking and Cybersecurity Operations (NLPS)

Advanced Information Technology will provide students with the fundamental concepts in networking and cybersecurity. Students are introduced to the principles and concepts of computer networking, covering the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students will be able to troubleshoot routers and switches and resolve common issues. The students will also explore the field of Cyber Security/Information Assurance focusing on the technical and managerial aspects of the discipline. Students will be introduced to the basic terminology, concepts, and best practices of computer/network security and the roles and responsibilities of management/security personnel. The students will learn the High School Course Titles and Descriptions 2022-2023 319 technologies used and techniques involved in creating a secure computer networking environment including authentication and the types of attacks against an organization.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Information Technology Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

Information Technology: Networking

7183 Principles of Computing (NLPS)

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7180 Information Technology Fundamentals (NLPS)

Information Technology Fundamentals provides the necessary competencies required for an entry-level Information Technology professional. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Students will also learn appropriate customer support, understand the basics of virtualization, desktop imaging, and deployment. This course should also prepare students for the CompTia A+ Certification Exam.

- Grade(s): 10, 11
- Required Prerequisites: Principles of Computing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7182 Networking Fundamentals (NLPS)

Networking Fundamentals describes, explores and demonstrates how a network operates in our everyday lives. The course covers the technical pieces and parts of a network and also societal implications such as security and data integrity. Using hands-on lab work, this course offers students the critical information needed for a role as an Information Technology professional who support computer networks. Concepts covered include the TCP/IP model, OS administration, designing a network topology, configuring the TCP/IP protocols, managing network devices and clients, configuring routers and switches, wireless technology and troubleshooting. Provides students the ability to implement, administer, and troubleshoot information systems that incorporate the Microsoft Windows clients and servers in an enterprise environment. Students will be introduced to managing applications, files, folders, and devices in a windows active directory environment.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Information Technology Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7251 Networking Capstone (NLPS)

Networking Capstone includes hands-on lab work, and a wide array of assessment types and tools. The course covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. The course also emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation.

- Grade(s): 12
- Required Prerequisites: Principles of Computing; Information Technology Fundamentals; Networking Fundamentals
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Dual Credit Pending

Information Technology: Software Development

7183 Principles of Computing (NLPS)

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7185 Website and Database Development (NLPS)

Website and Database Development will provide students a basic understanding of the essential Web and Database skills and business practices that directly relate to Internet technologies used in Web site and Database design and development. Students will learn to develop Web sites using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Additionally students will be introduced to the basic concepts of databases including types of databases, general database environments, database design, normalization and development of tables, queries, reports, and applications. Students will be familiarized with the use of ANSI Standard Structured Query Language. Students will be introduced to data concepts such as data warehousing, data mining, and BIG Data. Students will develop a business application using database software such as Microsoft Access.

- Grade(s): 10, 11
- Required Prerequisites: Principles of Computing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7184 Software Development (NLPS)

Software Development introduces students to concepts and practices of programming languages and software development. Students are introduced to algorithms and development tools used to document/implement computer logic. Discusses the history of software development, the different types of programming such as real time processing, web/database applications, and different program development environments. Concepts will be applied using 311 Indiana Department of Education High School Course Titles and Descriptions: 2023-2024 different programming languages, and students will develop and test working programs in an integrated system.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Website & Database Development
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Counts as a quantitative reasoning course
- Counts as a science credit
- Dual Credit Pending

Information Technology: Additional Perkins V Courses

5236 Computer Science II: Programming (PV)

Computer Science II explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers, and data file access methods. An emphasis on logical program design using a modular approach, which involves task-oriented program functions.

- Grade(s): 12
- Required Prerequisite: Principles of Computing; Computer Science I
- Credits: 2 Semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas. Fulfills a science course requirement for all diplomas.
- Dual Credit Pending

5253 Computer Science III: Cybersecurity Capstone (PV)

Computer Science III: Cybersecurity introduces the secure software development process including designing secure applications, writing secure code designed to withstand various 69 Indiana Department of Education High School Course Titles and Descriptions types of attacks, and security testing and auditing. It focuses on the security issues a developer faces, common security vulnerabilities and flaws, and security threats. The course explains security principles, strategies, coding techniques, and tools that can help make software fault tolerant and resistant to attacks. Students will write and analyze code that demonstrates specific security development techniques. Students will also learn about cryptography as an indispensable resource for implementing security in real-world applications. Students will learn the foundations of cryptography using simple mathematical probability. Information theory, computational complexity, number theory, and algebraic approaches will be covered. Schools may use the PLTW curriculum to meet the standards for this course. Schools using the curriculum and are part of the Project Lead the Way network must follow all training and data collection requirements.

- Grade(s): 12
- Required Prerequisite: Principles of Computing; Computer Science I; Computer Science II
- Credits: 2 Semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

4588 Networking II: (PV)

The OSI and TCP/IP functions and services are examined in detail. Students will learn how a router addresses remote networks and determines the best path to those networks, employing static and dynamic routing techniques.

- Grade(s): 12
- Required Prerequisite: Information Technology Fundamentals; Networking Fundamentals
- Credits: 2 Block course; 2 Semester course, 2 credits per semester
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

5257 Networking II: Servers & Security (PV)

Networking II: Servers focuses on the software skills needed to manage a network. Students will learn and practice the skills necessary to perform in the role of a network administrator. They will be able to accomplish fundamental network management tasks on a server such as set up of computer network services, create users and appropriate login scripts, develop groups, set the server remotely, set up security, backup/restore the server and setup/maintain clients.

- Recommended Grade(s): 12
- Required Prerequisite: Information Technology Fundamentals; Networking Fundamentals
- Credits: 2 Block course; 2 Semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

Law & Public Safety: Criminal Justice

7193 Principles of Criminal Justice (NLPS)

Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

- Grade(s): 10, 11
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7191 Law Enforcement Fundamentals (NLPS)

Law Enforcement Fundamentals Critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organization. This includes the evolution of law enforcement at federal, state, and local levels.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Criminal Justice
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7188 Corrections and Cultural Awareness (NLPS)

Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are stressed. Additionally, this course takes a further examination of the American correctional system; the study of administration of local, state, and federal correctional agencies. The examination also includes the history and development of correctional policies and practices, criminal sentencing, jails, prisons, alternative sentencing, prisoner rights, rehabilitation, and community corrections including probation and parole. Current philosophies of corrections and the debates surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments, and special populations are discussed.

- Grade(s): 11, 12
- Required Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

5824 Criminal Justice II (PV)

Criminal Justice II introduces students to concepts and practices in traffic control as well as forensic investigation at crime scenes. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry as well as collection of evidence, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information gathering activities and chain of custody procedures will also be reviewed. Current trends in criminal justice and law enforcement will also be covered.

- Grade(s): 12
- 2 Block Course
- Recommended Prerequisite: Criminal Justice I
- Credits: 2 Semester course, 2 credits per semester
- Counts as a directed elective or elective for all diploma
- Dual Credit Pending

Science, Technology, Engineering, & Math (STEM): Engineering

4802 Introduction to Engineering Design (NLPS)

Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students begin with completing structured activities and move to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented.

- Grade(s): 9, 10
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

5644 Principles of Engineering (NLPS)

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. Schools may use the PLTW curriculum to meet the standards for this course.

- Grade(s): 10, 11
- Required Prerequisites: Introduction to Engineering Design
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

5538 Digital Electronics (NLPS& PV)

Digital Electronics is a course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities should provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry software will be used to develop and evaluate the product design. This course engages students in critical thinking and problem-solving skills, time management and teamwork skills.

- Grade(s): 11, 12
- Required Prerequisites: Introduction to Engineering Design; Principles of Engineering
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

5650 Civil Engineering and Architecture (NLPS& PV)

Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design.

- Grade(s): 11, 12
- Required Prerequisites: Introduction to Engineering Design; Principles of Engineering
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

5518 Aerospace Engineering (NLPS& PV)

Aerospace Engineering should provide students with the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evolution of aircraft, space vehicles and their operating systems. Emphasis should include investigation and research on flight characteristics, analysis of aerodynamic design, and impact of this technology on the environment. Classroom instruction should provide creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of air and space vehicles, their systems, and launching, guidance and control procedures.

- Grade(s): 11, 12
- Required Prerequisites: Introduction to Engineering Design; Principles of Engineering
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
- Dual Credit Pending

5534 Computer Integrated Manufacturing (NLPS & PV)

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes.

- Grade(s): 11, 12
- Required Prerequisites: Introduction to Engineering Design; Principles of Engineering
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
- Course Aligned with Postsecondary Courses for Dual Credit through Ivy Tech

5698 Engineering Design and Development (NLPS & PV)

Engineering Design and Development is an engineering research course in which students work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide the team to reach a solution to the problem. The team and/or individual(s) communicates their solution to a panel of stakeholders at the conclusion of the course. As the capstone course in the Engineering Pathway, EDD engages students in critical thinking, problem-solving, time management, and teamwork skills.

- Grade(s): 12
- Required Prerequisites: Introduction to Engineering Design; Principles of Engineering; and one pre-engineering specialty course
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
- Dual Credit Pending

Science, Technology, Engineering, & Math (STEM): Additional Perkins V Courses

5608 Advanced Manufacturing I (CIM II) – (PV)

Advanced Manufacturing I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Domains include safety and impact, electricity, manufacturing essentials, fluid power principles, mechanical principles, lean manufacturing, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Students take this course with the goal of being a skilled machine operator, repair technician, or working in management at any company that produces goods and services using advanced manufacturing techniques. Work based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

- Grade(s): 12
- Required Prerequisite: Computer Integrated Manufacturing (CIM I)
- Credits: 2 Semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

Transportation, Distribution, & Logistics: Automotive Collision Repair

7215 Principles of Collision Repair (NLPS)

Principles of Collision Repair provides students an overview of the operating, electrical, and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive collision industry. Students will study the basics of collision repair, along with learning to perform basic service and maintenance, including the car's starting and charging system.

- Grade(s): 10
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7204 Automotive Body Repair (NLPS)

Automotive Body Repair provides students with an understanding of the materials, measuring, welding, and information resources applicable to collision repair. Students will study steel and aluminum dent repair, including the welding practices commonly performed within an automotive repair environment. Students will gain basic skills and knowledge in oxy-fuel welding, cutting, brazing and plasma cutting, gas metal arc welding, squeeze type resistance welding, exterior panel welding and I-CAR welding test preparation. Students will also learn the installation of moldings, ornaments, and fasteners with emphasis on sheet metal analysis and safety.

- Grade(s): 11
- 2 Block Course: 1st Block – Automotive Body Repair, 2nd Block – Plastic Body and Painting Fundamentals
- Required Prerequisites: Principles of Collision Repair
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

7206 Plastic Body Repair and Painting Fundamentals (NLPS)

Plastic Body Repair and Paint Fundamentals introduces the types of fiberglass and plastic materials used in auto body repair and considerations for automotive painting. Students will explore methods for repairing fiberglass and plastic damage, like welding, reinforcing, repairing holes, and retexturing plastic. Students will be asked to demonstrate the proper use of primers and sealers, spraying techniques, and an understanding of various paint finishes.

- Grade(s): 11
- 2 Block Course: 1st Block – Automotive Body Repair, 2nd Block – Plastic Body and Painting Fundamentals
- Required Prerequisites: Principles of Collision Repair; Automotive Body Repair
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

7380 Collision Repair Capstone (NLPS)

This course further explores important skills and competencies within the Automotive Body Technology Pathway. Topics such as Automotive Painting Technology, Collision Damage Appraising, and Fiberglass Plastic Repair. Additionally, Co-Op and Internship opportunities will be available for students.

- Grade(s): 12
- 3 Block Course: 1st Block – Collision Repair, 2nd Block – Collision Repair, 3rd Block – Collision Repair
- Required Prerequisites: Principles of Collision Repair; Automotive Body Repair; Plastic Body Repair and Paint Fundamental
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

Transportation, Distribution, & Logistics: Automotive Service

7213 Principles of Automotive Services (NLPS)

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.

- Grade(s): 10
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Dual Credit Pending

7205 Brake Systems (NLPS)

This course teaches theory, service and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today's automobiles. This course will emphasize professional diagnosis and repair methods for brake systems.

- Recommended Grade(s): 11
- 2 Block Course: 1st Block – Brake Systems, 2nd Block – Steering and Suspensions
- Required Prerequisites: Principles of Automotive Services
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

7212 Steering and Suspensions (NLPS)

This course will study driveline theory and in-car service procedures. Theory and overhaul procedures related to the driveshaft and axle assemblies for front and rear wheel drive vehicles are included as well. Additionally, this course teaches theory, service and repair of automotive steering and suspension systems. It provides an overview of various mechanical, power, and electrical steering and suspension systems used on today's automobiles and will emphasize professional diagnosis and repair methods for steering and suspension systems.

- Grade(s): 11
- 2 Block Course: 1st Block – Brake Systems, 2nd Block – Steering and Suspensions
- Required Prerequisites: Principles of Automotive Services; Brake Systems
- Credits: Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

7375 Automotive Service Capstone (NLPS)

This course further explores important skills and competencies within the Automotive Service Technology Pathway. Students will be exposed to an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in various automotive systems. Students will understand other topics such as Engine Repair, Climate Control, and Driveline Service. Additionally, co-op, and internship opportunities will be available for students.

- Grade(s): 12
- 3 Block Course: 1st Block – Automotive Service, 2nd Block – Automotive Service, 3rd Block – Automotive Service
- Required Prerequisites: Principles of Automotive Services; Brake Systems; Steering and Suspensions
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas
- Course Aligned with Postsecondary Courses for Dual Credit through Vincennes University

Jobs for America's Graduates

0522 JAG I

JAG is a state-based, national non-profit organization dedicated to helping high school students of promise who have experienced challenging or traumatic life experiences achieve success through graduation. JAG is a resiliency-building workforce preparation program that helps students learn in-demand employability skills and provides a bridge to post-secondary education and career advancement opportunities.

- Grade(s): 10, 11
- Recommended Prerequisite: None
- Credits: 2 Semester course, 1 credit per semester
- Counts as an elective for all diplomas

0532 JAG II

Designed to help students of promise graduate from high school and make a successful transition to postsecondary education and/or meaningful employment.

- Grade(s): 11, 12
- Recommended Prerequisite: Successful completion of JAG I
- Credits: 2 Semester course, 1 credit per semester
- Counts as an elective for all diplomas

Junior Reserve Officer Training Corps (J-ROTC)

0516 JR ROTC: CIVIL AIR PATROL (CAP)

This course is designed to develop: (1) citizenship and patriotism, (2) self-discipline, (3) physical fitness, (4) reliance and leadership, and (5) the skills used in decision making, communications, and problem-solving. The course content and experiences enable the students to understand the role of the military in support of national objectives and to become familiar with basic military knowledge, gender equity issues, benefits, and requirements. Topics to be included in the course are: (1) military history, (2) ROTC in the military, (3) substance abuse, (4) map reading, (5) marksmanship and firearm safety, (6) military drill, (7) field activities, (8) reserve components, and (9) first aid and hygiene. Opportunities are provided to explore the qualities and traits of courage, self-sacrifice, and integrity. Junior Reserve Officer Training Corps programs must be approved by and meet the requirements of the appropriate military organization.

- Grade(s): 10, 11, 12
- Recommended Prerequisite: None
- Credits: 2 Semester course, 1 credit per semester
- Counts as an elective for all diplomas

Additional Information on MCIT Clubs & Programs

ACE Mentoring - Architecture, Construction and Engineering
https://acementor.org
Engage, excite and enlighten high school students to pursue careers in architecture, engineering and construction through mentoring.

CAP - Civil Air Patrol
https://www.gocivilairpatrol.com
Aerospace Education, CADET programs, Emergency Services, Civilian Air Force Cadets

DECA - Distributive Education Clubs of America (Marketing and Business)
www.deca.org
Provides members and advisors with development activities through local and national competitions.

FBLA - Future Business Leaders of America
https://www.fbla-pbl.org
Local and national competitions

HOSA - Future Health Professionals
http://www.hosa.org
Biomedical Sciences and Health Sciences students. HOSA is a national student organization whose mission is to promote career opportunities in the health care industry.

JAG - *Jobs for Americas Graduates*
http://www.jag.org

NTHS - National Technical Honor Society
https://nths.org
Encourages higher scholastic achievement, cultivates a desire for personal excellence, and helps top students find success in the workplace.

ROBOTICS - F.I.R.S.T Robotics and VEX Robotics
https://www.firstinspires.org/robotics/frc
Grades 9-12, local and national competitions

Skills USA - All Career and Technical students compete locally and nationally in skills and leadership.
https://www.skillsusa.org