COURSE COMPETENCIES

Teachers of certain Business, Culinary & Hospitality, Engineering & Advance Technology, Health & Human Services, Information Technology and Public Service courses must also possess specific course competencies as outlined in the tables below.

BUSINESS

Accounting		
ACCT-1150	Microcomputer Applications in Accounting	Experience with Accounting Software (Excel, Peachtree, QuickBooks, etc.)
ACCT-2180	Intermediate Accounting 1	CPA or 5 years professional accounting work experience or professional courses/ seminars or workshops in accounting
ACCT-2190	Intermediate Accounting 2	CPA or 5 years professional accounting work experience or professional courses/ seminars or workshops in accounting
ACCT-2270	Managerial Accounting	CPA or 5 years professional accounting work experience or professional courses/ seminars or workshops in accounting
ACCT-2300	Federal Income Tax - Individual	Income Tax Experience within the last 6 years
Business		
BUSN 1010	Business Enterprise	5 years related experience in corporate business environment within the last 10 years
BUSN 1210	Entrepreneurship Fundamentals	2 years Small Business management/ownership experience **or** professional courses/ seminars/ workshops in Entrepreneurship
BUSN 2000	Global Entrepreneurship	2 years Small Business management/ownership and experience with importing and exporting of product/service offerings **or** professional courses/seminars/workshops in importing and exporting of products and services for small businesses.
BUSN 2010	Personal Money Management	Professional certifications (e.g., Certified Financial Planner, Chartered Financial Consultant, and Personal Financial Specialist) **or** professional courses/ seminars **or** workshops in Personal Money Management.
BUSN 2020	Personal Investment Fundamentals	Professional credentials (e.g., licensing as a broker or financial planner) **or** professional courses/ seminars **or** workshops in Personal Money Management.
BUSN 2030	Global Purchasing & Supply Chain Management	MBA (any area) including minimum 9 credit hours marketing coursework plus 3 years' experience in professional level international purchasing strategies **or** Global Supply Chain Management experience within last 10 years.
BUSN 2060	Corporate Responsibility	One-year Corporate Responsibility work experience **or** professional courses/ seminars/ workshops, **or** participation in related professional associations
BUSN 2100	International Business	Equivalent of 9 graduate semester hours in International Business courses/ seminars/ workshops **or** at least (3) years international years' work experience
Business Communications		

BCOM 2070	Technical Business Communications & Project Management Principles	PMP Certification

Management

MGMT 1010	Principles of Management	2 years plus private sector experience in a managerial/leadership role
MGMT-1150	Personnel & Human Resource Management	Minimum of 2 years Human Resource Management experience.
MGMT-1210	Entrepreneurship & Small Business Management	2 years Small Business management/ownership experience
MGMT-2000	Business Management Software Applications	Experience with Business Software (Project, MS Office & Visio)
MGMT-2775	Business Management Statistics	12 credits of college level statistical course work or related work experience

Marketing

MKTG-1010	Principles of Marketing	Meets the department grid
MKTG-1020	Dynamics of Retailing	Meets Business Administration Area Qualifications Grid or has bachelor's degree in Marketing and 5 years of retail store management experience in the past 10 years.
MKTG-1050	E-Marketing	Meets the department grid plus 2+ years digital experience in at least 3 course content areas (SEO, online display advertising, pay-per-click advertising /SEM, e- mail marketing, online copywriting, mobile marketing, social media marketing, website design, online PR) in the past 10 years
MKTG-1210	Small Business Marketing	Meets Business Administration Area Qualifications Grid or has bachelor's degree in Business and 5 years of small business marketing experience in the past 10 years.
MKTG-1510	Sports and Entertainment Marketing	Meets the department grid plus preferred 2+ years of sports & entertainment marketing industry experience
MKTG-1810	Customer Service	Meets the department grid
MKTG- 2000	Customer Relationship & Database Marketing	Meets Business Administration Area Qualifications Grid **or** has bachelor's degree in Marketing **and** 5 years of CRM or Database Marketing experience in the past 10 years.
MKTG- 2010	Professional Selling	Meets the department grid plus 2+ years of sales experience
MKTG- 2020	Advertising & Promotion Management	Meets Business Administration Area Qualifications Grid or has bachelor's degree in advertising or communications-related field plus 5 years advertising, promotion, or public relations experience within the past 10 years.
MKTG-2050	Marketing Strategies	Meets the department grid
MKTG-2060	Consumer Behavior	Meets Business Administration Area Qualifications Grid or has master's degree in communications or social sciences plus 5 years marketing experience within the past 10 years.
MKTG- 2100	Global Marketing	Meets Business Administration Area Qualifications Grid

CULINARY ARTS

Culinary Arts		
CULH 1050	Culinary Techniques	ACF certification (CCC), SERV Safe certification, minimum of 5 years field experien with soups, stocks, vegetables, potatoes, grains, and pastas.
CULH 1155	Sanitation	Registered Sanitarian (R.S.).
CULH 1200	Cost Control	Minimum of 5 years food service experience including food, labor, and beverage cos control
CULH 1255	Table Service	Culinary Certificate, SERV Safe certification, minimum of 5 years dining room experience
CULH 1310	Culinary Skills Development	ACF certification (CCC), SERV Safe certification, minimum of 5 years field experien in meat, poultry, seafood processing, breakfast, pantry, and hors d'oeuvres
CULH 1320	International Kitchen	ACF certification (CCC), SERV Safe certification, minimum of 5 years field experien in restaurant operations, international dishes, and terminology.
CULH 1340	Production Baking	ACF certification (CWPC), SERV Safe certification, minimum of 5 years' experience the field of baking: cakes, cookies, pies, breads.
CULH 1400	Supervision	Minimum of 5 years food service supervisory experience including hiring, terminating training, and evaluating employee performance.
CULH 1420	Purchasing	Minimum of 5 years food experience in hospitality purchasing.
CULH 1430	Menu Planning	Minimum of 5 years food service experience including writing and planning menus.
CULH 1440	Beverage Service	ServSafe Alcohol Trainer Certification, minimum of 5 years field experience includin alcohol service, training and bar management.
CULH 2015	A la Carte Dining	ACF certification (CCC), ServSafe certification, minimum of 5 years field experience in both front and back of the house restaurant operations
CULH 2025	Wine Appreciation	Certified Sommelier and minimum of 5 years experience in the field.
CULH 2035	Nutritional Cooking	ServSafe certification and minimum of 5years experience in nutritional cuisine. ACF certification (CCC) preferred but not required.
CULH 2040	Garde Manger	ACF certification (CCC), ServSafe certification, minimum 5 years experience in ACF culinary cold salons demonstrating charcuterie skills.
CULH 2045	Vegetarian Cuisine	ServSafe certification and a minimum of 5 years experience in vegetarian cuisine. ACF certification (CCC) preferred but not required.
CULH 2050	Catering	Minimum of 5 years experience managing catered functions.
CULH 2080	Wedding Cakes	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experienc preparing wedding cakes, butter creams, rolled fondants, gum paste.
CULH 2085	The Art of Sculpted Cakes	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experience preparing cakes, butter creams, rolled fondants, gum paste.

CULH 2100	Centerpieces	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experienc making pastillage, sugar centerpieces and cooking.
CULH 2120	Chocolate Creations	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experienc preparing chocolates, candies, centerpieces.
CULH 2160	Plated Desserts	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experienc designing, preparing, creating plated desserts.
CULH 2180	Pastry Arts	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experienc preparing European style tortes, mousses, chocolates, ice cream.
CULH 2200	Artisan & Special Breads	ACF certification (CWPC), ServSafe certification, minimum of 5 years field experienc baking artisan breads, display breads and breakfast pastries.
		Note: CCC = Certified Chef de Cuisine. CWPC = Certified Working Pastry Chef

ENGINEERING & ADVANCE TECHNOLOGY

Mechanical Technology		
CORE-1000	Industrial Technology Fundamentals	Familiarity with the tools and hardware typically encountered by a technician working on a plant floor.
CORE-1060	Industrial Computer Technology	Canvas X and Microsoft Office 2003 Must be familiar with software utilized throughout the Industrial Technology programs such as NI Nultisim and Labview.
Drafting & Computer Graphics		
DRCG 1140	Interactive Computer Graphics- Introduction to 2D & 3D AutoCAD	AutoCAD 2017 or Most Recent Release. Related Work and/or Tech Ed. Experience in the content area of instruction; Knowledge of both Tool Fixture and Architecture applications preferred; Knowledge of 3D modeling and 3rd angle orthographic projection required; Knowledge of 1st angle projection suggested
Electronic Technology		
ELEC 1100	Introduction to Electronics	Basic knowledge of electronic component parameters. Basic circuit structure and introduction to series, parallel, series/parallel and ohms law. Must be familiar with Multisim
ELEC 1111	Electrical Fundamentals for Non-Electrical Tradesmen	Basic knowledge of electronic component parameters. Basic circuit structure and introduction to series, parallel, series/parallel and ohms law. Must be familiar with Multisim
ELEC 1161	Electronic Technology 1	Basic Circuits Challenge, DC Circuits Challenge, Digital Challenge, Mathcad 12, Multisim 8, Power Supply, and Solid State Challenge. Understanding of basic DC circuitry involving resistors in series, parallel, and combination series-parallel circuits.
ELEC 1171	Electronic Technology 2	Basic Circuits Challenge, DC Circuits Challenge, Digital Challenge, Mathcad 12, Multisim 8, Power Supply, and Solid State Challenge. Understanding of basic AC circuitry involving resistors, capacitors, and inductors in series, parallel, and combination series-parallel circuits.

ELEC 1182	Semiconductor Theory & Devices	Familiar with active electronic components including diodes, and transistor
ELEC 1191	Introduction to Op- Amps & Linear Integrated Circuits	Basic Circuits Challenge, DC Circuits Challenge, Digital Challenge, Mathcad 12, Multisim 8, Power Supply, and Solid State Challenge. Ability to analyze and develop circuits containing operational amplifiers and integrated linear circuits such as 555 timers.
ELEC 1192	Semiconductor Devices & Circuits	Familiar with active electronic components including diodes, transistor and thyristors and introduction to operational amplifiers. Analysis of various transistor circuit configurations
ELEC 1211	Digital Electronics	Basic Circuits Challenge, DC Circuits Challenge, Digital Challenge, Mathcad 12,
	Basics	Multisim 8, Power Supply, and Solid State Challenge. In depth knowledge of digital logic families with an emphasis on CMOS and TTL. Must also possess a working knowledge of boolean mathematics.
ELEC 1221	Microcontrollers With Robotic Application	Experience with programming and interfacing microcontrollers.
ELEC 1230	Troubleshooting 1	Familiarity with basic troubleshooting techniques and test equipment.
ELEC 1240	Troubleshooting 2	Familiarity with basic troubleshooting techniques and test equipment.
ELEC 1270	Computer Servicing 1	Direct knowledge of computer operating software, computer architecture and troubleshooting.
ELEC 1300	Electric Theory- Electrical Equipment & Introduction to Machine Circuits	Knowledge of basic electrical concepts and components and introductory relay logic and PLC
ELEC 1310	Electrical-Basic Direct & Alternating Current Motor Control Circuits	Knowledge of AC/DC motors and the methods used to drive them in industry. Lab analaysis of all operating parameters (voltage, speed, etc).
ELEC 2005	Discrete Amplifiers & Introduction to Op-Amps	Introduction to Op Amp circuits using breadboarding and Multisim
ELEC 2010	Instrumentation 1- Transducer Theory	Knowledge of various methods of transforming real-world parameters into electrical signals. Heavy use of LabVolt hands-on trainers
ELEC 2150	LabVIEW Basics 1	Knowledge of introductory NI Labview concepts
ELEC 2160	LabVIEW Basics 2	Knowledge of advanced NI Labview circuits and analysis and preparation for possible certification
ELEC 2270	Microcontroller Programming	Knowledge of various microprocessor systems and the programming environment for them. Extensive use of lab coding equipment.

ELEC 2370	Electrical- Polyphase Alternating Current Fundamentals, Electrical Instruments & Illumination	Knowledge of introductory 3-phase energy generation and conduction.
ELEC 2380	Electrical- Alternating Current Machines	Knowledge of conversion of 3-phase to an industrial machine's requirements. Conversion of 3-phase AC to DC use.
ELEC 2400	Microprocessor Interfacing	Knowledge of peripheral interface adapter ICs and the required coding to communicate with them
ELEC 2410	Electrical-National Electrical Code	Knowledge of the National Electrical Code, its application and various interpretations found in Michigan
ELEC 2490	Instrumentation 2- Advanced Op- Amps & Linear Integrated Circuits	Knowledge of advanced op amp circuit configurations and their applications to industrial problems.
ELEC 2550	Electrical- Industrial Electronic Fundamentals	Basic knowledge of electronic component parameters. Basic circuit structure and introduction to series, parallel, series/parallel and ohms law. Must be familiar with Multisim
ELEC 2560	Electrical-Welding	Knowledge of basic resistance, arc, mig and tig welding fundamentals and the
	Controllers	power supply requirements produced by each type of controller.
ELEC 2650	Computer Servicing 1	Knowledge of the construction, commissioning and proper configuration of home and business computer systems
ELEC 2660	Computer Servicing 2	Direct knowledge of computer operating software, computer architecture and troubleshooting.
ELEC 2750	Industrial Servicing 1	Experience with industrial controls, programming and troubleshooting.
ELEC-2760	Industrial Servicing 2	Experience with industrial controls, programming and troubleshooting.
Pre-Engineering		
ENGR 1000	Introduction to Engineering	Engineering degree required. Experience in product development process, 3D printing, CAD/CAM/CAE is preferred.
Media & Communication Arts		
MACA 1010	Introduction to Photography	Adobe Light room, Adobe Photoshop Must have working knowledge of professional photography editing software (such as current versions of Adobe Photoshop and Light Room). Must present professional photography portfolio showing broad range of professional photographic skill.

MACA 1020	Fundamentals of Design	Must have knowledge and understanding of the concept process and design development. Utilizing strategy, brainstorming techniques and thumbnail sketch concept processes are required. Must be comfortable working with traditional design tools and techniques, silk screen printing and presentation techniques. Understanding how the elements and principles of design are used in video, photography, illustration, 3D animation, motion graphics, interactive and design is essential. Work experience must include a creative position in an advertising agency, art studio, design firm or freelance design. Portfolio must have various samples showing good design (advertising, design, video, photography, illustration, interactive/web, motion graphics, 3D and animation, etc.).
MACA 1040	Illustration Fundamentals	Must have working knowledge of 1, 2 and 3 point perspective, as well as a broad range of tangible drawing and rendering techniques. Portfolio must have various advertising/media samples such as corporate identify programs and related ads.
MACA 1055	Digital Layout: Adobe	Adobe Indesign, Adobe Acrobat Must have knowledge and understanding of the concept process and design development. Utilizing strategy, brainstorming techniques and thumbnail sketch concept processes are required. Work experience must include a creative position in an advertising agency, art studio, design firm or freelance design. Must be proficient in current page layout and design software; Photoshop, Illustrator, Acrobat and InDesign. Have a working knowledge of JPEG, GIF, PNG, PSD TIFF, EPS, AI, INDD, IDML and PDF file formats. Must have a very good understanding of different color theories and printing processes. Portfolio must have various samples such as brochures, catalogs, advertising, posters, websites and ebooks.
MACA 1065	Black & White Photography	Must have working knowledge of professional black and white film photography lab operations and procedures. Helpful to have working knowledge of professional photography editing software (such as current versions of Adobe Photoshop and LightRoom). Must present professional photography portfolio showing broad range of professional photographic skill.
MACA 1070	Rendering	Must have working knowledge or rendering a broad range of products with markers. Portfolio must have various advertising/media samples such as corporate identity programs and related ads.
MACA 1090	Figure Illustration 1	Must have working knowledge of anatomy and drawing the human form as it relates to illustration and animation fields. Portfolio must have various advertising/media samples such as corporate identity programs and related ads.

MACA 1130	Advertising Art	Adobe Indesign, Adobe Acrobat Must have knowledge and understanding of the concept process and design development. Utilizing strategy, brainstorming techniques and thumbnail sketch concept processes are required. Must be comfortable working with traditional design tools and presentation techniques. Understanding how the elements and principles of design are used. Work experience must include a creative position in an advertising agency, (art director, senior art director, creative director) and a portfolio that includes concept to finish advertising agency work. Must have experience working in different types of media (outdoor, radio, tv, web/interactive, print).
MACA 1160	Previsualization	Must have working knowledge of storyboarding and other visual storytelling techniques as they relate to the film, animation, and other digital media industries. Portfolio must have various advertising/media samples such as corporate identity programs and related ads.
MACA 1200	Digital Illustration	Adobe Illustrator CS Ability to create and manipulate vector art using paths, fills, and other techniques. Understanding of different mediums for digital art and how to work with them. Understanding of different color modes and formats and how to use them. Ability to use color, design, line weight, detail and other concepts to maximize visuals.
MACA 1310	Typography & Spacial Development	Adobe Indesign, Adobe Acrobat, Adobe Illustrator Must have knowledge and understanding of the concept process and design development. Utilizing strategy, brainstorming techniques and thumbnail sketch concept processes are required. Must be comfortable working with traditional design tools and presentation techniques. Understanding how the elements and principles of design are used. Work experience must include a creative position in an advertising agency, art studio, design firm, type setting/design/lettering firm or freelance design Must have knowledge, understanding and a love for typography. Thinking with type, working conceptually with type, and experimentation using type as image is required. Must be comfortable working with grids for page layout Must be proficient in current page layout and design software; Photoshop, Illustrator, Acrobat and InDesign. Must have a working knowledge of JPEG, GIF, PNG, PSD TIFF, EPS, AI, INDD, IDML and PDF file formats. Portfolio must include concept to finish creative work and various samples showing good typography (logos, advertising, posters, etc.).
MACA 1320	Introduction to Photoshop	Adobe Photoshop CS Ability to use Photoshop for a multitude of processes for creation and manipulation of imagery. Ability to create and edit channels, layers, masks, brushes, paths. Understanding of different file types. Understanding different color modes and depths.

MACA 1400	Introduction to Digital Video	AVID Media Composer, Adobe Premiere Must have working knowledge of several video editing softwares; including but not limited to AVID, Adobe Premiere. Experience with a multitude of video capturing equipment in setting up, working with, and troubleshooting. Experience with a multitude of audio capturing equipment in setting up, working with, and troubleshooting. Knowledge of video shooting techniques and story-telling ability. Portfolio must have corporate and in-field examples displaying various levels of video production.
MACA 1410	Television/Video Studio Production	AVID Media Composer, Adobe Premiere Must have working knowledge of several video editing softwares; including but not limited to AVID, Adobe Premiere. Experience with a multitude of video capturing equipment in setting up, working with, and troubleshooting. Experience with a multitude of audio capturing equipment in setting up, working with, and troubleshooting. Knowledge of video shooting techniques and story-telling ability. Portfolio must have corporate and in-field examples displaying various levels of video production.
MACA 1420	Film Production 1	AVID Media Composer, Adobe Premiere Must have working knowledge of several video editing softwares; including but not limited to AVID, Adobe Premiere. Experience with a multitude of video capturing equipment in setting up, working with, and troubleshooting. Experience with a multitude of audio capturing equipment in setting up, working with, and troubleshooting. Knowledge of video shooting techniques and story-telling ability. Portfolio must have corporate and in-field examples displaying various levels of video production.
MACA 1820	Design for the Web 1	Adobe Photoshop, Adobe Dreamweaver, Adobe Illustrator Must have working knowledge of planning, layout, design of web pages and sites. Working knowledge of CSS and HTML languages. Create and compress JPEG, GIF, PDF and PNG assets using Adobe PSD and Illustrator programs. Manage and publish pages and sites to server using an FTP program. Portfolio must have various web page and site samples and or working examples.
MACA 1840	Design for the Web 2	Adobe Photoshop, Adobe Dreamweaver, Adobe Illustrator Must have intermediate knowledge of planning, layout, design of web pages and sites. Working knowledge of CSS and HTML languages. Create and compress JPEG, GIF, PDF and PNG assets using Adobe PSD and Illustrator programs. Manage and publish pages and sites to server using an FTP program. Portfolio must have various web page and site samples and or working examples.

MACA 2020	Design for Advertising	Adobe Indesign, Adobe Acrobat, Adobe Illustrator Must have knowledge and understanding of the concept process and design development. Utilizing strategy, brainstorming techniques and thumbnail sketch concept processes are required. Must be comfortable working with traditional design tools and presentation techniques. Understanding how the elements and principles of design are used. Work experience must include a creative position in an advertising agency, art studio, design firm, freelance design. Must be proficient in current page layout and design software; Photoshop, Illustrator, Acrobat and InDesign. Have a working knowledge of JPEG, GIF, PNG, PSD TIFF, EPS, AI, INDD, IDML and PDF file formats. Portfolio must have various samples of good design, (logos, corporate identity, advertising, posters, websites, point of purchase, packaging, etc.).
MACA 2110	Photojournalism	Adobe Lightroom, Adobe Photoshop Must have working knowledge of professional photography editing software (Such as current versions of Adobe Photoshop and LightRoom). Must present professional photography portfolio showing broad range of professional photographic skill.
MACA 2150	Advanced Digital Layout	QuarkXpress, Adobe InDesign and Adobe Acrobat Must have working knowledge of current page layout and design specifications, JPEG, GIF, TIFF, EPS, PICT, PDF, and PSD file formats. Portfolio must have various advertising/media samples such as corporate identity programs and related ads.
MACA 2176	Painted Illustration	Must have working knowledge of drawing and painting as it relates to the illustration, film and animation fields. Portfolio must have various advertising/media samples such as corporate identity programs and related ads.
MACA 2180	Concept Illustration	Adobe Photoshop
MACA 2190	Figure Illustration 2	Must have working knowledge of anatomy and drawing the human form as it relates to illustration and animation fields. Portfolio must have various advertising/media samples such as corporate identity programs and related ads.
MACA 2200	Digital Editing	Adobe After Effects, Adobe Illustrator Ability to create and manipulate vector and raster based imagery. Understand principles of animation and how to apply them in After Effects. Ability to storytell for different projects. Ability to work between softwares. Ability to work with audio. Understand motion, timing, and movement in After Effects.
MACA 2210	Studio Photography	Adobe Lightroom, Adobe Photoshop Must have working knowledge of professional photography editing software (such as current versions of Adobe Photoshop and LightRoom). Must be able to setup and use an array of multitude of lighting, studio, and photographic equipment. Must present professional photography portfolio showing broad range of professional photographic skill.
MACA 2250	Compositing & 2D Animatics	Adobe Photoshop, Adobe Illustrator, Adobe After Effects

MACA 2300	Advanced Photoshop	Adobe Photoshop CS Must have knowledge of advanced raster based imagery creation and manipulation. Ability to layer concepts and principles to create seamless pieces of artwork. Usage of Photoshop from a multitude of projects from sketching, shading, photographic, compositing, automotive, product and other areas. Understanding of what impact Photoshop has on the industry and knowledge of methods used.
MACA 2310	Advanced Photographic Techniques	Adobe Light room, Adobe Photoshop Must have working knowledge of professional photography editing software (such as current versions of Adobe Photoshop and Lightproof). Must present professional photography portfolio showing broad range of professional photographic skill.
MACA 2400	Advanced Digital Video	AVID Media Composer, Adobe Premiere Must have working knowledge of several video editing softwares; including but not limited to AVID, Adobe Premiere. Experience with a multitude of video capturing equipment in setting up, working with, and troubleshooting. Experience with a multitude of audio capturing equipment in setting up, working with, and troubleshooting. Knowledge of video shooting techniques and story-telling ability. Portfolio must have corporate and in-field examples displaying various levels of video production.
MACA 2510	Introduction to 3D	Cinema 4D, Adobe Photoshop, Adobe After Effects Knowledge of 3D concepts and principles. Ability to model, texture, light, animate, and render in 3D. Ability to work from 3D to 2D to composite elements together. Ability to work on different projects from logos to products to environments to characters. Understanding of different file types and uses. Ability to work in different visual styles. Ability to work between softwares.
MACA 2520	3D Modeling & Rendering	Autodesk Maya, Adobe Photoshop, Foundry Mari, Foundry Nuke, Pixologic Zbrush Knowledge of 3D concepts and principles. Ability to model, texture, light, animate, and render in 3D. Ability to work from 3D to 2D to composite elements together. Ability to work on different projects from logos to products to environments to characters. Understanding of different file types and uses. Ability to work in different visual styles. Ability to work between softwares.

MACA 2530	Advanced 3D Rendering	Autodesk Maya, Vray, Mental Ray, Foundry Nuke, Foundry Mari Knowledge of 3D concepts and principles. Ability to texture, light, and render in 3D. Understanding different materials, shaders, rendering engines and their concepts and applications. Ability to work from 3D to 2D to composite elements together. Ability to work on different projects from logos to products to environments to characters. Understanding of different file types and uses. Ability to work in different visual styles. Ability to work between softwares.
MACA 2540	3D Animation	Autodesk Maya Knowledge of 3D concepts and principles. Ability to model, texture, light, rig, animate, and render in 3D. Ability to work from 3D to 2D to composite elements together. Ability to work on different projects from logos to products to environments to characters. Understand principles of animation and how to apply them in 3D. Ability to storytell for different projects. Understanding of different file types and uses. Ability to work in different visual styles. Ability to work between softwares.
MACA 2550	3D Dynamic Simulation	Autodesk Maya, Realflow Knowledge of 3D concepts and principles. Knowledge of dynamic simulation tools including but not limited to particles, cloth, fur/hair, liquid simulation, rigid body, explosions. Ability to model, texture, light, animate, and render in 3D. Understanding of different file types and uses. Ability to work between softwares.
MACA 2560	Compositing with After Effects & Nuke	Adobe After Effects, Foundry Nuke, Adobe Photoshop Knowledge of 3D and Compositing concepts and principles. Ability to apply compositing principles to create and combine elements using techniques including rotoscoping, masking, tracking, color correction, and other relative tools. Understanding of different file types and uses. Ability to work between softwares.
MACA 2570	Advanced After Effects	Adobe Illustrator, Adobe After Effects Ability to use vector, raster, and 3D to create animations. Ability to manage teams. Ability to tell stories using a multitude of mediums and methods. Understanding of and ability to apply principles of animation. Ability to work with plugins and advanced animation techniques.
MACA 2720	Flash Multimedia 1	Adobe Flash, Adobe Photoshop, Adobe Illustrator Must have working knowledge of planning, layout, design of web animation techniques. Working knowledge of CSS, HTML and Actionscript languages. Create and compress Vector, JPEG, GIF, and PNG assets using Adobe PSD and Illustrator programs. Portfolio must have various web animation examples.

MACA 2760	Flash Multimedia 2	Adobe Flash, Adobe Photoshop, Adobe Illustrator Must have working knowledge of planning, layout, design of web animation techniques. Working knowledge of CSS, HTML and Actionscript languages. Create and compress Vector, JPEG, GIF, and PNG assets using Adobe PSD and Illustrator programs. Portfolio must have various web animation examples.
MACA 2880	Design for the Web 3	Adobe Flash, Adobe Photoshop, Adobe Illustrator, Adobe Dreamweaver Must have advanced working knowledge of planning, layout, design of web pages and sites. Working knowledge of CSS and HTML languages. Create and compress JPEG, GIF, PDF and PNG assets using Adobe PSD and Illustrator programs. Manage and publish pages and sites to server using an FTP program. Portfolio must have various web page and site samples and or working examples.
Mechatronics		
MECT 1211	Mechatronics - AC/DC Electrical Systems	Amatrol - SkillAce Full knowledge of electronics including industrial relay logic. Must demonstrate ability to explain and complete all of the related Amatrol labs
MECT 1212	Mechatronics- Electrical Control Systems	Amatrol - SkillAce Knowledge of electronic, relay logic, wiring techniques for control panels. Must be able to completely explain all of the electrical control systems and the Amatrol 850 system.
MECT 1213	Mechatronics- Electronic Sensors	Amatrol - SkillAce Electronics knowledge and must be able to explain all of the types of sensors used throughout the entire Amatrol 850 system.
MECT 1214	Mechatronics- Pneumatics	Amatrol - SkillAce Knowledge of Pneumatics (IFPS certified is a plus), must be able to explain and complete all of the related exercises on the Amatrol lab equipment
MECT 1215	Mechatronics- Automated Material Handling (robots)	Amatrol - SkillAce Knowledge of robot programming, certification is a plus. Should be able to fully explain how a robot works and how to program them for material handling operations. Be able to program both the Saturn and Fanuc robots we have in the lab.
MECT 1216	Mechatronics- Mechanical Systems	Amatrol - SkillAce Must be able to explain and demonstrate all of the mechanical concepts available on our Amatrol Mechanical simulator.
MECT 1310	Pneumatics Technology Fundamentals	Automation Studio Must know and explain the symbols (ANSI and ISO), functionality and failure modes of components. Be able to draw and explain complete circuits, and should be able to do all of the labs on the pneumatic simulators. Should know Automation Studio. IFPS certification is a huge plus.

MECT 1320	Industrial Hydraulic Fundamentals	Automation Studio Must know and explain the symbols (ANSI and ISO), functionality and failure modes of components. Be able to draw and explain complete circuits, and should be able to do all of the labs on the hydraulic simulators. Should know Automation Studio. IFPS certification is a huge plus.
MECT 1640	Introduction to Programmable Controllers-Allen Bradley Plc	Knowledge of digital electronics and the similarities to old relay logic circuits. Must be able to demonstrate standard ladder logic programming techniques using ladder diagram and use of function blocks and functions. Should be able to complete any of the lab exercises on the Allen-Bradley simulators.
MECT 2110	Mechatronics Programming 1- Siemens PLC	Siemens - Simatic Manager Knowledge of digital electronics, and the similarities to old relay logic circuits. Must be able to demonstrate standard ladder logic programming techniques using ladder diagram and use of function blocks and functions. Should be able to complete any of the Amatrol lap exercises.
MECT 2112	Mechatronics Programming 2- Siemens PLC	Siemens - Simatic Manager See above and add timer and counter functionality. Must be able to demonstrate standard ladder logic programming techniques using ladder diagram and use of function blocks and functions. Should be able to complete any of the Amatrol lap exercises.
MECT 2210	Mechatronics System Operations 1- Siemens PLC	Siemens - Simatic Manager Knowledge of digital electronics, and the similarities to old relay logic circuits. Must be able to demonstrate standard ladder logic programming techniques using ladder diagram and use of function blocks and functions. Should be able to complete any of
MECT 2212	Mechatronics System Operations 2- Siemens PLC	Siemens - Simatic Manager Must be able to demonstrate programming of the Amatrol 85 system using Siemens ladder logic and using function blocks. IEC61131-3 (Codesys) knowledge / experience is a plus
MECT 2640	Programmable Logic Controls 1- Allen Bradley PLC	Rockwell Studio 5000, RS-Links Must be able to demonstrate programming techniques using Allen-Bradley ladder logic and using function blocks. IEC61131-3 (Codesys) knowledge / experience is a plus
MECT 2740	Programmable Logic Controls 2- Allen Bradley PLC	Rockwell Studio 5000, RS-Links Must be able to demonstrate programming techniques using Allen-Bradley ladder logic and using function blocks. IEC61131-3 (Codesys) knowledge / experience is a plus
MECT 2840	Panel view Programming	Rockwell Studio 5000, RS-Links Must be able to demonstrate ability to hookup and communicate with Allen bradley and Siemens HMI products as well as programming various types of messages to the screen.
Product Development		
PRDE 1010	Design Principles	Related work and / or Tech Ed. Experience in the content area of instruction. Acknowledge of 1st and 3rd angle orthographic projection required.

PRDE 1200	Theory of Sheet Metal Fabrication	Related Work and/or Tech Ed. Experience in the content area of instruction; Completed the Current MCC Learning Management System Teacher Certification.
PRDE 1250	Basic Blueprint Reading	Related Work and/or Tech Ed. Experience in the content area of instruction with emphasis on the tool fixture industry; Knowledge of 1st angle and 3rd angle orthographic projection preferred; Completed the Current MCC Learning Management System Teacher Certification.
PRDE 1300	Industrial & Materials Processes	Related Work and/or Tech Ed. Experience in the content area of instruction; Completed the Current MCC Learning Management System Teacher Certification.
PRDE 1400	Introduction to SolidWorks & 3D Parametric Solid Modeling	Solid Works 2017 or most Recent Release Related Work and/or Tech Ed. Experience in the content area of instruction; Simulation experience suggested.
PRDE 1410	SolidWorks: Components & Assemblies	Solid Works 2017 or most Recent Release Related Work and/or Tech Ed. Experience in the content area of instruction with emphasis on the tool fixture industry; Knowledge of 3D modeling and 3rd angle orthographic projection required; Knowledge of 1st angle projection suggested; Simulation experience suggested.
PRDE 1450	AutoCAD: Detailing & Assemblies	AutoCAD 2017 or Most Recent Release Related Work and/or Tech Ed. Experience in the content area of instruction with emphasis on the tool fixture industry; Knowledge of 3D modeling and 3rd angle orthographic projection required; Knowledge of 1st angle projection suggested
PRDE 1520	NX Fundamentals	Related work and / or Tech Ed. Experience in the content area of instruction. A knowledge of 1st and 3rd angle orthographic projection required. Knowledge of 3D modeling, assembly, and 2D drawing is required. Must know current operating software.
PRDE 1620	CATIA Essentials	V5-6R2015 Related work and / or Tech Ed. Experience in the content area of instruction. A knowledge of 1st and 3rd angle orthographic projection required. Knowledge of 3D modeling, assembly, and 2D drawing is required. Must know current operating software.
PRDE 1710	Fundamentals of Clay Modeling	Related work experience in the content of instruction. Knowledge of Automotive clay design.
PRDE 1820	Alias Principles	ALIAS 2016 Related work experience in the content of instruction. Knowledge of Automotive studio design. Must know current operating software.
PRDE 2000	Product Development Process	Related work experience. Knowledge of product development from the infancy stages to the recycling of materials.
PRDE 2100	Design Intent & Analysis	Related work experience. Knowledge of Design for Assembly and Design for Manufacturing plus experience with Failure Mode Effects Analysis (FMEA)

PRDE 2180	Advanced Clay Modeling	Related work experience in the content of instruction. Knowledge of Automotive clay design.
PRDE 2200	Jig & Fixture Detailing & Design	Any Industrial CAD software of the most current release; Recommended but not limited to: NX, CATIA, Soildworks, AutoCAD. Related Work and/or Tech Ed. Experience in the content area of instruction; Completed the Current MCC Learning Management System Teacher Certification for Online Delivery, as required.
PRDE 2400	Plastics Design & Manufacturing	Related work experience in the content of instruction. Knowledge of the design and manufacturing practices of current plastic materials
PRDE 2420	Capstone Project	NX9 / V5-6R2015 / Solid Works 2017 Related work experience in the content of instruction. A knowledge of a NX / CATIA / SolidWorks software and 3rd angle projection is required.
PRDE 2520	NX Advanced	NX9 Related work and / or Tech Ed. Experience in the content area of instruction. A knowledge of 1st and 3rd angle orthographic projection required. Knowledge of 3D modeling, assembly, surfacing is required. Must know current operating software.
PRDE 2620	CATIA Advanced	V5-6R2015 Related work and / or Tech Ed. Experience in the content area of instruction. A knowledge of 1st and 3rd angle orthographic projection required. Knowledge of 3D modeling, assembly, and surfacing is required. Must know current operating software.
PRDE 2720	Advanced Alias	ALIAS 2016 Related work experience in the content of instruction. Knowledge of Automotive studio design. Must know current operating software.
Robotics		
ROBO 1110	Robot Operations	Roboguide V8.0 Fanuc certificate in robot operations, and must be able to explain all of the basic operations of a Fanuc robot. Show how to create, load and save TP programs to a memory stick. Should be able to complete all currently used lab exercises.
ROBO 1435	ArcTool Robot Welding	Roboguide V8.0 Must have completed an arc / gas welding course, be Fanuc certified for robot operations and material handling. Can demonstrate horizontal, vertical, and overhead welds with the robot.
ROBO 1440	Material Handling Robot	Roboguide V8.0 Fanuc certificate in robot operations, and must be able to explain all of the material handling operations of a Fanuc robot. Show how to create and manipulate all types of frames. Demonstrate how to use and program robot I/O. Should be able to complete all currently used lab exercises.

ROBO 2445	Handling Tool Robot Features & Options	Roboguide V8.0 Fanuc certificate in robot operations and material handling. Must be able to demonstrate many of the advanced functions such as macros, program shifts, and mastering.
ROBO 2450	Vision Robot	Roboguide V8.0 Fanuc certificates in robot operations, material handling, nd iRVision. Must be able to demonstrate how to setup and run irvision as part of material handling programs.
Technical Math		
TMTH 1150	RCL Analysis	Familiarity with basic mathematics and algebra as it applies to the analysis of electronic circuitry.

APPLIED TECHNOLOGY

Applied Mathematics		
ATAM 1150	Mathematics-Shop Arithmetic	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM 1160	Mathematics- Algebra	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM 1170	Mathematics- Geometry	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM 1350	Mathematics- Arithmetic & Introductory Algebra for Electrical & Allied Crafts	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM 1360	Mathematics- Electrical Circuitry- Algebra & Trigonometry	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM 2150	Mathematics- Trigonometry	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM 2350	Mathematics-A.C. Circuitry- Trigonometry & Vectors	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM-2160	Mathematics- Trigonometry & Shop Application	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM-2170	Mathematics- Compound Angles	2 years minimum Industry or teaching exp within 2 years Teaching experience preferred
ATAM-2190	Mathematics- Gearing	2 years minimum Industry or teaching exp within 2 years.
Advanced Processes		
ATAP 1030	Feeds, Speeds and Advanced Tools	PPT, Excel Experience with high speed machining and hard milling
ATAP 1050	CNC Essentials	PPT, Excel
ATAP 2010	Drafting-2D CAD with MasterCAM	MasterCAM X Ability to teach drafting and geometry as it relates to MasterCam

ATAP 2020	Art-To-Part-Digital Art to 3D CNC Machining	ArtCam Pro 8.0 Experience with digital art, surfacing, and toolpaths
ATAP 2030	2D MasterCAM- Mill Programming & Machining	MasterCAM X 2D geometry in MasterCam and 2D toolpaths
ATAP 2310	CNC Mill G & M Programming & CNC Machining	HASS Controller, Immersive S/W Ability to teach G&M code Fanuc compatible for CNC mill
ATAP 2320	CNC Lathe G & M Programming & CNC Machining	HASS Controller, Immersive S/W Ability to teach G&M code Fanuc compatible for CNC lathe
ATAP 2330	EDM RAM-G & M Programming & Machining	Experience with Electrode design, manufacturing, EDM burn
ATAP 2340	EDM WIRE-G & M Programming & Machining	Experience with wire burn
ATAP 2350	3D MasterCAM- Die/Mold CNC Machining	MasterCAM X 3D wire frame, surfacing, solid, 3D toolpaths
ATAP 2360	3D Cimatron CAD/CAM- Die/Mold Machining	Cimatron E 7.0 3D wire frame, surfacing, solid, 3D toolpaths
ATAP 2370	3D Computer Aided Mold/Electrode Design	Cimatron E 7.0 3D wire frame, surfacing, solid, 3D toolpaths
ATAP 2380	Rapid Prototyping & Reverse Engineering	Cimatron E 7.0, Catalyst Ability to create solid models scan, build, build prototypes in various ways
Building Construction & Maintenance		
ATBC 2600	Construction Law & Contract Administration	Must possess a valid State of Michigan Residential Builder's license and demonstrate extensive knowledge in construction law, including the Michigan Occupational Code, Construction Code, Construction Lien Act, Home Solicitation Sales Act, minimum wage laws, employing minors, disabilities and civil rights acts, judicial jurisdiction and filing venue, elements of contract, etc. Must have a working knowledge of accounting principles, (i.e., balance sheets, profit and loss statements), and cost estimating. Must possess knowledge of OSHA Health & Safety Standards as they apply to the construction industry.
Fluid Power Technology		
ATFP 1140	Fluid Power-Basic Circuits (Special Extended Laboratory Experience)	Automation Studio 5.2
Stationary Steam		
ATSS 1150	Steam-Heat Fundamentals	Boiler Operator License preferred

ATSS 1160	Steam-Steam Boilers (Low & High Pressure Operations)	Boiler Operator License preferred

AUTOMOTIVE TECHNOLOGY

Automotive Technology		
AUTO 1000	Automotive Systems	Master Mechanic or applicable ASE certifications
AUTO 1010	Automotive Electrical Systems	Master Mechanic or applicable ASE certifications
AUTO 1030	Automotive Electronics	Master Mechanic or applicable ASE certifications
AUTO 1100	Automotive Brake Systems	Master Mechanic or applicable ASE certifications
AUTO 1110	Automotive Suspension Component Service	Master Mechanic or applicable ASE certifications
AUTO 1120	Automotive Suspension Alignment Procedures	Master Mechanic or applicable ASE certifications
AUTO 1200	Automotive Engines	Master Mechanic or applicable ASE certifications
AUTO 1270	Small Engine Service/Repair	Master Mechanic or applicable ASE certifications
AUTO 1320	Automotive- Automatic Transmission Theory & Diagnosis	Master Mechanic or applicable ASE certifications
AUTO 1330	Automotive- Manual Transmission & Powertrain Systems	Master Mechanic or applicable ASE certifications
AUTO 1400	Automotive Starting & Charging Systems	Master Mechanic or applicable ASE certifications
AUTO 1420	Automotive Air Conditioning Theory & Service	Master Mechanic or applicable ASE certifications
AUTO 1440	Hybrid Electric Vehicle Fundamentals	Master Mechanic or applicable ASE certifications
AUTO 1520	Automotive Fuel Systems	Master Mechanic or applicable ASE certifications Proficiency in computer based design and analytical tools of the industry such as Automation Studio, required.
AUTO 1530	Automotive Ignition & Emission Systems	Master Mechanic or applicable ASE certifications
AUTO 2190	Automotive Brakes & Suspension Laboratory	Master Mechanic or applicable ASE certifications
AUTO 2200	Automotive Upper Engine Service	Master Mechanic or applicable ASE certifications
AUTO 2210	Automotive Lower Engine Service	Master Mechanic or applicable ASE certifications

AUTO 2290	Automotive Engine Laboratory	Master Mechanic or applicable ASE certifications
AUTO 2300	Rear Wheel Drive Automatic Transmission Service	Master Mechanic or applicable ASE certifications
AUTO 2310	Front Wheel Drive Automatic Transmission Service	Master Mechanic or applicable ASE certifications
AUTO 2390	Automotive Driveline Laboratory	Master Mechanic or applicable ASE certifications
AUTO 2410	Advanced Automotive Electronics	Master Mechanic or applicable ASE certifications
AUTO 2440	Hybrid Electric Vehicle Power Management	Master Mechanic or applicable ASE certifications
AUTO 2490	Automotive Electrical & Air Conditioning Laboratory	Master Mechanic or applicable ASE certifications
AUTO 2491	Automotive Electrical & Air Conditioning Laboratory-CAT	Master Mechanic or applicable ASE certifications
AUTO 2492	Maintenance and Light Repair (MLR) Lab	Master Mechanic or applicable ASE certifications
AUTO 2500	Automotive Drivability & Diagnosis	Master Mechanic or applicable ASE certifications
AUTO 2590	Automotive Drivability Lab	Master Mechanic or applicable ASE certifications
AUTO 2591	Automotive Drivability Laboratory-CAT	Master Mechanic or applicable ASE certifications
AUTO 2810	Dealership Experience 1	Master Mechanic or applicable ASE certifications & must be a GMASEP Coordinator for this course
AUTO 2820	Dealership Experience 2	Master Mechanic or applicable ASE certifications & must be a GMASEP Coordinator for this course
AUTO 2830	Dealership Experience 3	Master Mechanic or applicable ASE certifications & must be a GMASEP Coordinator for this course
AUTO 2840	Dealership Experience 4	Master Mechanic or applicable ASE certifications & must be a GMASEP Coordinator for this course
AUTO 2850	Dealership Experience 5	Master Mechanic or applicable ASE certifications & must be a GMASEP Coordinator for this course

TECH EDUCATION

Climate Control Technology

CLCT 1200	Fundamentals of Air Conditioning & Refrigeration	Mechanical Contractor's License required
CLCT 1300	Refrigeration 1	Mechanical Contractor's License required
CLCT 1400	Air Conditioning 1	Mechanical Contractor's License required
CLCT 1500	Heating 1	Mechanical Contractor's License required
CLCT 1600	Duct Layout & Fabrication	Mechanical Contractor's License required
CLCT 1650	Systems Design of Heating & Air Conditioning	Mechanical Contractor's License required
CLCT 1700	Fundamentals of Controls	Mechanical Contractor's License required
CLCT 1750	Intermediate Controls	Mechanical Contractor's License required
CLCT 2300	Refrigeration 2	Mechanical Contractor's License required
CLCT 2350	Mechanical Codes	Mechanical Contractor's License required
CLCT 2400	Air Conditioning 2	Mechanical Contractor's License required
CLCT 2500	Heating 2	Mechanical Contractor's License required
CLCT 2700	Advanced Controls	Mechanical Contractor's License required
Drafting Architectural		
DRAD 1140	Residential Drafting & Design	AutoCAD
DRAD 2090	Architectural Commercial Drafting & Design	AutoCAD 2006 and Architectural Desktop
DRAD 2120	Structural Detailing & Design	Digital Canal Structural Design 2.9
DRAD 2140	Architectural Illustration 2	Adobe Photo Shop and AutoCAD
DRAD 2220	Architectural Design Procedures	AutoCAD and Architectural Desktop
DRAD 2280	Architectural Drafting & Design Studio	AutoCAD, Architectural Desktop, and Vis Desktop
Land Surveying Technology		
SURV 1100	Elementary Surveying	Professional Surveyor License
SURV 1110	Field Procedures	Professional Surveyor License
SURV 1200	Route Surveying	Professional Surveyor License
SURV 2220	Civil & Survey Drafting	AutoCAD Land, Map, and Civil Desktops. Professional Surveyor License
SURV 2300	Boundary Surveying	Professional Surveyor License
SURV 2400	Topographic Surveying	Professional Surveyor License
SURV 2500	Introduction to Control Surveys	Professional Surveyor License
SURV 2600	Advanced Construction Layout Surveying 2	Professional Surveyor License
SURV 2700	Advanced Survey Instrumentation	Professional Surveyor License

Dental Sciences		
DNHY 1112	Principles of Dental Hygiene	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery. Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1115	Preclinical Dental Hygiene and Theory	Lecture: Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.Clinic: Bachelor's degree required. Five years expereicence in a dental clinic setting. Two to three years of clinical or didactic teaching experince in a dental hygiene educational program.
DNHY 1116	Dental Anatomy/Histology Theory	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery. Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1117	Dental Anatomy/Histology Lab	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1118	Dental Radiology Theory	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program.
DNHY 1119	Dental Radiology Lab	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.

DNHY 1120	Preclinical Dental Hygiene Theory	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1121	Preclinical Dental Hygiene Clinic	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1210	Periodontics	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1212	Pharmacology for the Dental Hygienist	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program.
DNHY 1214	Clinic Theory I	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program.
DNHY 1215	Clinical Dental Hygiene I	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY1314	Clinic Theory II	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program.
DNHY1315	Clinical Dental Hygiene II	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program.

DNHY 1316	Pain Control for the Dental Hygienist Theory	Master's degree required. Active anesthesia and nitrous oxide administration license. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 1317	Pain Control for the Dental Hygienist Lab	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have Local and Nitrous endorsement on licensure.
DNHY 1318	Dental Materials Theory	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program.
DNHY 1319	Dental Materials Lab	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program
DNHY 2010	General/Oral Pathology	Lecture: Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Lab: Bachelor's degree required. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 2012	Community Dental Hygiene	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required. Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 2014	Clinic Theory III	Dental Hygiene Associates Degree and a Master's Degree in Dental
DNHY 2015	Clinical Dental Hygiene III	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 2020	Patient Management Capstone	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.

DNHY 2022	Practice Management	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 2024	Clinic Theory IV	Dental Hygiene Associates Degree and a Master's Degree in Dental Hygiene, Education, Public Health or related discipline required, or Doctor of Dental Medicine or Dental Surgery Five years experience as a clinical Registered Dental Hygienist required. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
DNHY 2025	Clinical Dental Hygiene IV	Bachelor's degree required. Five years experience in a dental clinic setting. Two to three years of clinical or didactic teaching experience in a dental hygiene educational program. Must have current RDH, DMD, or DDS license to practice in the State of Michigan.
Education: Early Childhood Studies		
ECHS-1100	Early Childhood Development	Master's degree in Child Development, Early Childhood Education, Psychology, Human Development, or a Master's degree in a related field with 18 graduate hours in the subject area. Five years full-time classroom experience (10,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood classroom (children ages 0-4)
ECHS-1150	Infant-Toddler- Development & Curriculum	Master's degree in Early Childhood Education, or a Master's degree in a related field with 18 graduate hours in the subject area. Five years full-time classroom experience (10,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood infant or toddler classroom (children 0-2)
ECHS-1200	Early Childhood Curriculums	Master's degree in Early Childhood Education. Five years full-time classroom experience (10,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood preschool or prekindergarten classroom (children ages 3-4). Plus, knowledge and experience writing curriculum for a prekindergarten classroom.
ECHS-1250	Family, School, & Community	Master's degree in Early Childhood Education, Child Development, Counseling, Psychology, Human Development, Social Work or a related field. Five years full- time experience (10,000 hours) working in a partnership with the families of typically developing children in a state (school district), or federal (military, Head start, GSRP) or accredited (NAEYC, NAFCC) early childhood classroom.

ECHS-1350	The Arts in Early Educations	Bachelor's degree in Early Childhood Education, Elementary Education or the Arts. Two years full-time classroom experience (4,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood preschool or prekindergarten classroom.
ECHS-1520	The Exceptional Child	Master's degree in Special Education in Early Childhood, Early Childhood Education, Child Development, Psychology, Human Development, Social Work or a Master's Degree in a related field with 18 graduate hours in the subject area. Five years full- time classroom experience (10,000 hours) working directly with exceptional children in a state (school district), or accredited (NAEYC, NAFCC) early childhood classroom.
ECHS-1550	Family Child Care Management	Bachelor's degree in Early Childhood Education, Elementary Education or a related field. Five years full-time experience (10,000 hours) working directly with children in a licensed, NAFCC accredited, family child care home.
ECHS-1580	School-Age Care	Bachelor's degree in Early Childhood Education, Elementary Education or a related field. Two years full-time classroom experience (4,000 hours) working directly with typically developing school age children.
ECHS-1710	Child Care Management	Master's degree in Early Childhood Education, Child Development, Elementary Education, Counseling or a related field. Five years full-time experience (10,000 hours) working as a director in a state (school district) or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood classroom.
ECHS-1801	CDA Credential Preparation	Bachelor's degree in Early Childhood, Elementary Educations or a related field. Extensive knowledge of the CDA and the credentialing process of the Council for Professional Recognition. Two years full-time experience (4,000 hours) working directly with typically developing children in an early childhood classroom.
ECHS-2000	Guidance and Behavior	Master's degree in Early Childhood Education, Child Development, Psychology, Human Development, Social Work or a Master's degree in a related field with 18 graduate hours in the subject area. Five years full-time classroom experience (10,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) classroom. Two years full-time classroom experience (4,000 hours) working directly with exceptional children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) classroom.

ECHS-2220	Planning and Teaching the Early Childhood Curriculum	Master's degree in Early Childhood Education or a related field. Five years full- time classroom experience (10,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood preschool or prekindergarten classroom (children ages 3-4). Extensive knowledge of early childhood curriculum models and experience writing curriculum for a prekindergarten classroom, two years of experience writing prekindergarten lesson plans.
ECHS-2315	Advocacy for Educators	Master degree in Early Childhood Education, Elementary Education or a related field. Two years full-time classroom experience (4,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood preschool or prekindergarten classroom (children ages 3-4). Plus an extensive understanding of NAEYC's Professional Standards and Competencies, NAEYC Code of Ethical Conduct as well as being current with policies and legislation affecting the field of early education.
ECHS-2330	Early Childhood Practicum	Master's degree in Early Childhood Education or a Master's degree in a related field with 18 graduate hours in Early Childhood Education. Five years full-time classroom experience (10,000 hours) working directly with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood preschool or prekindergarten classroom (children ages 3-4). Two years of experience writing curriculum for a prekindergarten classroom. Two years experience managing early education Teachers and or Teacher Assistants.
ECHS-2550	Early Childhood Practicum Seminar	Master's degree in Early Childhood or a Master's degree in a related field with 18 graduate hours in Early Childhood. Five years full-time experience (10,000 hours) working with typically developing children in a state (school district), or federal (military, Head Start, GSRP) or accredited (NAEYC, NAFCC) early childhood preschool or prekindergarten classroom (children ages 3-4). Two years of experience writing curriculum for a prekindergarten classroom. Extensive understating of NAEYC's Professional Standards and Competencies.
Education		
EDUC-1010	Paraprofessional Theory & Practice	Master's degree in Teaching, Elementary Education or related field. 5 Master's degree in Teaching, Elementary Education, Special Education, or related field. Five years full-time (10,000 hours) K-12 classroom teaching experience. Experience working with Paraprofessionals.
EDUC-2010	Introduction to Education	Master's degree in Teaching, Elementary Education or related field. Five years full- time (10,000 hours) K-12 classroom teaching experience. Experience working with Paraprofessionals.
Health & Human Services		
HHSC-1010	Animal Health Careers	Full time or adjunct faculty in Vet Tech program.

HHSC-1020	Orientation to Physical Therapist Assistant	PT or PTA with minimum of three years of clinical experience. APTA membership preferred.
HHSC-1030	Orientation to Occupational Therapy	Current working knowledge of the tenants of OT, including ethics, standards of practice, a variety of practice settings, OT practice framework and OT/OTA education requirements and formats. Two or more years of clinical experience with OTA supervision. OTFL or COTAL current state licensure and national registration required.
HHSC-1040	Introduction to the Profession of Nursing	Master of Science in Nursing Required. Two years recent bedside experience.
HHSC-1700	Medical Terminology	CMA (AAMA), RMA (AMT), RN or other related current professional certification/licensure. Experience in health sciences utilizing an in depth knowledge of anatomy, pharmacology and diagnostic procedures.
HHSC-1740	Survey of Body System	CMA (AAMA), RMA (AMT), RN or other related current professional certification/licensure. Experience in health sciences utilizing an in depth knowledge of anatomy, pharmacology and diagnostic procedures.

Health Information Technology

HITT-1102	Introduction to Health Information Management & Health Care Environment	RHIA or RHIT. Experience in healthcare data management.
HITT-1106	Legal and Ethical Aspects of Health Information Technology	RHIA, RHIT, or other related current professional certification/licensure. Experience in law for health informatics and information management.
HITT-1107	Applied Healthcare Statistics	RHIA, RHIT or other related current professional certification/licensure. Experience in hospital and/or general math statistics
HITT-1201	Pathophysiology & Pharmacology Applications in Health Information	RHIA, RHIT, CMA (AAMA), RN or other related current professional certification/licensure. Experience in health sciences utilizing an in depth knowledge of anatomy, pharmacology and diagnostic procedures.
HITT-1209	International Classification of Disease (ICD)— Beginning Coding	RHIA, RHIT and/or AHIMA approved ICD-10-CM/PCS trainer. Experience in ICD- 10-CM/PCS classification systems.
HITT-1210	Electronic Health Record for HIM	RHIA, RHIT or other related current professional certification/licensure. Experience in electronic health record management systems.
HITT 1211	Introduction to Health Informatics	RHIA, RHIT, CHDA or other related current professional certification/licensure. Computer experience in healthcare. Computer major with healthcare experience.
HITT-2105	Healthcare Reimbursement Systems	RHIA, RHIT or other related current professional certification/licensure. Experience in all healthcare reimbursement methodologies.
HITT-2108	International Classification of Disease (ICD)— Intermediate Coding	RHIA, RHIT and/or AHIMA approved ICD-10-CM/PCS trainer. Experience in ICD- 9- CM and ICD-10-CM/PCS classification systems.
HITT 2109	Beginning CPT/HCPCS & Outpatient Coding	RHIA, RHIT, CCS, CCS-P, CPC or other related current professional certification/licensure. Experience CPT and HCPCS classifications systems.

HITT-2202	Organizational Performance for Health Information Management Professionals	RHIA, RHIT or other related current professional certification/licensure. Experience in organization performance and quality management.
HITT-2203	Management for Health Information Management Professionals	RHIA or RHIT. Experience in health information management.
HITT-2204	Health Information Technology Seminar	RHIA, RHIT. Experience in health information management.
HITT-2207	Professional Practice Experience	RHIA, Program Coordinator
HITT 2208	Intermediate CPT/HCPCS & Outpatient Coding	RHIA, RHIT, CCS, CCS-P, CPC or other related current professional certification/licensure. Experience in CPT and HCPCS classification systems.
HITT 2109	Beginning CPT/HCPCS & Outpatient Coding	RHIA, RHIT, CCS, CCS-P, CPC or other related current professional certification/licensure. Experience in CPT and HCPCS classification systems.
HITT 2202	Organizational Performance for Health Information Management Professionals	RHIA, RHIT, CMA (AAMA) or other related current professional certification/licensure. Experience in organization performance and quality management
HITT 2203	Management for Health Information Management Professionals	RHIA or RHIT. Experience in health information management.
HITT 2204	Health Information Technology Seminar	RHIA, RHIT. Experience in health information management.
HITT 2207	Professional Practice Experience	RHIA, Program Coordinator
HITT 2208	Intermediate CPT/HCPCS & Outpatient	RHIA, RHIT, CCS, CCS-P, CPC or other related current professional certification/licensure. Experience in CPT and HCPCS classification systems
Medical Assisting		
MAST-1150	Applied Math for Medical Assistants	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure. Experience in dosage calculation and administering medication.
MAST-1201	Ethical and Legal Considerations in the Medical Office	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure. Administrative experience in ambulatory care. Course work in ethics.
MAST-1202	Communication and Administrative Practices in the Medical Office	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure. Administrative experience in ambulatory care and electronic medical records (EMR).
MAST–1203	Financial Business Practices for the Medical Office	CMA (AAMA), RMA (AMT), RN, or other related current CPC-H, RJOT. CCS. CCS- P, or related certification. Billing/Coding experience in ambulatory/hospital setting.
MAST-1240	Infection Control Practices	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure. Experience in infection control and personal protective equipment.

MAST-1611	Laboratory Procedures & Phlebotomy for the Medical Office	CMA (AAMA), RMA (AMT), RN, MT, MLT or other related current certification/licensure. Phlebotomy in ambulatory care/ hospital setting with knowledge of outpatient collection processes.
MAST-1811	Topics Pharmacology for Medical Assistants	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure. Experience in medical administration and pharmacology.
MAST-2010	Fundamental Clinical Office Skills	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure. Clinical ambulatory experience in oral and parenteral medication administration, obtaining vital signs, performing patient screening, and assisting a provider with an exams and minor office surgery with pediatrics and adults.
MAST-2021	Nutrition & Medical Dietary Needs	CMA (AAMA), RMA (AMT), RN, or other related current certification/licensure. Course work in nutrition.
MAST-2301	Medical Assistant Administration Practicum	Practicum Coordinator or Program Coordinator
MAST-2400	Medical Assistant Clinical Practicum	Practicum Coordinator or Program Coordinator
MAST-2500	Medical Assistant Refresher/Exam Review	CMA (AAMA), RMA (AMT), RN, or other related current professional certification/licensure.
Nursing		
NURS-1145	Health Assessment in Nursing	Masters of Science in Nursing Required. Two years recent bedside experience.
NURS-1155	Fundamentals of Nursing Practice 1	Masters of Science in Nursing Required. Two years recent bedside experience.
NURS-1165	Introduction to Clinical Nursing Skills	Bachelors of Science in Nursing required; Masters of Science in Nursing Preferred. Two years recent bedside experience.
NURS-1175	Health Assessment Skills in Nursing	Bachelors of Science in Nursing required; Masters of Science in Nursing Preferred. Two years recent bedside experience.
NURS-1245	Fundamentals of Nursing Practice 2A	Masters of Science in Nursing Required. Two years recent bedside experience.
NURS-1255	Fundamentals of Nursing Practice 2B	Masters of Science in Nursing Required. Two years recent bedside experience.
NURS-1265	Introduction to Clinical Nurse Practice	Bachelors of Science in Nursing required; Masters of Science in Nursing preferred.Experience in Medical-Surgical Nursing within the past two years;
NURS-1345	Introduction to Adult Medical-Surgical Nursing A	Masters of Science in Nursing required; Experience in Medical-Surgical Nursing within the past two years
NURS-1355	Introduction to Adult Medical-Surgical Nursing Clinical	Masters of Science in Nursing required; Experience in Medical-Surgical Nursing within the past two years
NURS-1365	Introduction to Adult Medical-Surgical Nursing Clinical	Bachelors of Science in Nursing required; Masters of Science in Nursing Preferred. Experience in Medical-Surgical nursing within the past two years.
NURS-1446	Psychiatric Mental Health Nursing A	Experience in Psychiatric Mental Health Nursing within the past two years. Master of Science in Nursing required.
NURS-1456	Psychiatric Mental Health Nursing B	Experience in Psychiatric Mental Health Nursing within the past two years. Master of Science in Nursing required.
NURS-1475	Psychiatric Mental Health Nursing Clinical	Bachelors of Science in Nursing required; Master of Science in Nursing preferred; Experience in Psychiatric Mental Health Nursing within the past two years.

NURS-2146	Childbearing Family Nursing	Experience in Child Bearing Family Nursing within the past two years Master of Science in Nursing required.
NURS-2156	Complications of Childbearing Nursing	Experience in Child Bearing Family Nursing within the past two years Master of Science in Nursing required.
NURS-2175	Childbearing Family Nursing Clinical	Bachelor of Science in nursing required; Master of Science majoring in nursing preferred. Experience in Childbearing Family Nursing including bedside experience within the past two years required.
NURS-2245	Intermediate Adult Medical-Surgical Nursing A	Experience in Medical-Surgical Nursing within the past two years; Master of Science in Nursing required.
NURS-2255	Intermediate Adult Medical-Surgical Nursing B	Experience in Medical-Surgical Nursing within the past two years; Master of Science in Nursing required.
NURS-2265	Intermediate Adult Medical-Surgical Nursing Clinical	Experience in Medical-Surgical Nursing within the past two years; Master of Science in Nursing required.
NURS-2346	Childhood Nursing A	Experence in Pediatric Nursing within the past 2 years. Master of Science Majoring in nursing required
NURS-2356	Childhood Nursing B	Experence in Pediatric Nursing within the past 2 years. Master of Science Majoring in nursing required
NURS -2375	Childhood & Family Nursing Clinical	Experience in Childhood Nursing within the past 2 years. Bachelor of Science in nursing required, MSN or MS in nursing preferred.
NURS-2445	Transition to Professional Nursing	Experience in Leadership and Management in Medical-Surgical Nursing within the past two years; Master of Science in Nursing required.
NURS-2455	Advanced Adult Medical-Surgical Nursing	Experience in Medical-Surgical Nursing within the past two years Master of Science in Nursing required.
NURS-2465	Integration of Nursing Practice Clinical	Bacehlor of Science in Nursing required; Master of Science in Nursing preferred. Experience in Leadership and Management in Medical-Surgical Nursing within the past two years
Occupational Therapy Assistant		
OTAS-1000	Foundation Skills of Occupational Therapy Practice	Current working knowledge of the OT practice framework, including application to case studies, activity analysis, therapeutic application and selection of activities, and the teaching/learning process. Two or more years of clinical experience with OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-1012	Medical & Professional Language	Current working knowledge of the OT practice framework, medical terminology and professional terminology as applied to case studies and clinical practice. Two or more years of clinical experience with OTA supervision. OTRL or COTAL Current state licensure and national registration required.
OTAS-1110	Mental Health Conditions	Current working knowledge and experience with mental health diagnoses, OT practice models and frames of reference, and the OT practice framework. Two or more years of clinical experience with mental health clients and OTA supervision. OTRL or COTAL current state licensure and national registration required.

OTAS-1210	Clinical Kinesiology	Current working knowledge and courses in the theories and principles of human movement in the application to function. Working knowledge of the OT practice framework. Two years of clinical experience with physical dysfunction clients and OTA supervision. Certification of training to teach online for the hybrid section of the course. OTRL or COTAL current state licensure and national registration required.
OTAS-1230	Introduction to Physical Rehabilitation-Lab	Current working knowledge and competency in basic OT intervention techniques for physical dysfunction and rehabilitation, OT practice models and treatment frames of reference, and the OT practice framework. Two or more years of clinical experience with physical dysfunction clients and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-1235	Human Development & Clinical Interaction	Current working knowledge of life span and developmental tasks in the physical, cognitive, and social domains as applied to the OT practice framework. Working knowledge of client communication skills and therapist to client interaction for therapeutic benefit with each developmental life span. Two or more years of clinical experience with birth to death clients. OTRL or COTAL current state licensure and national registration required.
OTAS-1300	Rehabilitation Conditions & Intervention Planning	Current working knowledge and competency in OT intervention techniques for physical dysfunction conditions birth to death, intervention/practice models and frames of reference, and the OT practice framework. Two or more years of clinical experience with physical rehabilitation conditions, clients, methods, including physical agent modalities of superficial and thermal application, and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-1351	Pediatric Occupational Therapy-Lecture	Current working knowledge of pediatric dysfunction, frames of reference, and intervention techniques for physical, psychosocial and school system intervention methods applied to OT practice models and the OT practice framework. Two or more years of clinical experience with pediatric clients, birth through late adolescences and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-1361	Pediatric Occupational Therapy-Lab	Current working knowledge of pediatric dysfunction, frames of reference, and intervention techniques for physical, psychosocial and school system intervention methods applied to the OT practice models, the OT practice framework, including current assessment tools, ADL/ IADL, feeding, positioning and handling, handwriting, animal assisted intervention and sensory integration. Two or more years of clinical experience with pediatric clients, birth through late adolescences and OTA supervision. OTRL or COTAL current state licensure and national registration required.

OTAS-1370	Therapeutic & Psychosocial Intervention-Lab	Current working knowledge and experience with psychosocial dysfunction, group dynamics and intervention, protocol development, safety techniques, application of psychosocial models of practice and frames of reference, interviewing difficult clients, and wellness and prevention outcomes. Two or more years of clinical experience with mental health clients and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-1401	Skills for OT Documentation I - Lab	Current working knowledge and application of the AOTA guidelines for documentation applied to the mental health client. Current working knowledge of third-party reimbursement guidelines and application to various settings and formats for both physical dysfunction and mental health. Two or more years of clinical experience involving documentation of OT services with an emphasis on mental health dysfunction and OTA supervision. OTFL or COTAL current state licensure and national registration required. OTFL or COTAL current state licensure and national registration required.
OTAS-1420	Professional Behaviors, Communication & Ethics	Current knowledge and demonstration of accepted and exemplary professional behavior in occupational therapy practice and the academic setting. Demonstration of open communications with peers, superiors, students and clients of all ages and stages of dysfunction. Knowledge of and adherence to current ethical standards set forth by the professional organization for occupational therapy and adherence and demonstration of ethical practice and procedures as mandated by program and college policies and procedures. Two or more years of clinical experience with OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-1450	Level I Fieldwork— First Placement	Current working knowledge of ACOTE fieldwork standards and OTA student clinical evaluation tools. Ability to foster a working relationship with clinical affiliates and practicing clinicians, including marketing, open communication verbally, technically, and onsite as needed. Open communications and reasonable availability to assigned students in clinical fieldwork sites. Two or more years of clinical experience, supervision of OTA practitioners and fieldwork OTA students in Level I fieldwork. OTRL or COTAL current state licensure and national registration required.
OTAS-2095	Technology & Environmental Intervention	Current working knowledge of assistive technology with various client populations for assessing, intervention planning, implementing, designing, and constructing, and obtaining equipment through appropriate channels and resources for reimbursement. Working knowledge should include splint construction and driver's training. Two or more years of clinical experience and OTA supervision. OTRL or COTAL current state licensure and national registration required.

OTAS-2350	Productive Aging	Current working knowledge of assistive technology with various client populations for assessing, intervention planning, implementing, designing, and constructing, and obtaining equipment through appropriate channels and resources for reimbursement. Working knowledge should include splint construction and driver's training. Two or more years of clinical experience and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-2370	Clinical Transition & Management	Current working knowledge of the skills involved in the service delivery of OT and the role of the OTA. This includes role delineation and professional responsibilities of service advocacy, management principles and ethics, service delivery to a variety of individuals and organizations in the current healthcare environment. Knowledge base must include evidence-based research and practice, communications and inter-professional relationships, reimbursement issues and principles for managing change. Two or more years of clinical experience, OTA supervision, and experience as a fieldwork educator Level I and II. OTRL or COTAL current state licensure and national registration required.
OTAS-2402	Skills for OT Documentation II - Lab	Current working knowledge and application of the current AOTA guidelines for documentation with a focus on physical dysfunction and wellness. Current working knowledge of third-party reimbursement guidelines, state licensure law and public health code, regulations, appeals, confidentiality and HIPAA as applied to various settings and formats for both physical dysfunction and mental health. Two or more years of clinical experience involving documentation of OT services and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-2410	Advanced Physical Rehabilitation Lecture	Current working knowledge of current advanced rehabilitation interventions, OT models/theories of practice and frames of reference, assessment tools and their application to the current OT practice framework and the role of the OTA. Two or more years of clinical experience in a variety of rehabilitation settings, including acute care, and OTA supervision. OTRL or COTAL current state licensure and national registration required.
OTAS-2425	Advanced Physical Rehabilitation-Lab	Current working knowledge of current advanced rehabilitation interventions, OT models of practice and frames of reference, assessment tools and their application to the OT practice framework and the role of the OTA. Two or more years of clinical experience in a variety of rehabilitation settings, including acute care, and OTA supervision. OTRL or COTAL current state licensure and national registration required.

OTAS-2450	Level 1 Fieldwork- 2nd Placement	Current working knowledge of current ACOTE fieldwork standards and OTA student clinical evaluation tools. Ability to foster a working relationship with clinical affiliates and practicing clinicians, including marketing, open communication verbally, technically, and onsite as needed. Open communications and reasonable availability to for assigned students in clinical fieldwork sites. Two or more years of clinical experience, supervision of OTA practitioners and fieldwork OTA students in Level I fieldwork. OTRL or COTAL current state licensure and national registration required.
OTAS-2580	Level 2 Fieldwork— First Placement	Current working knowledge of current ACOTE fieldwork standards and OTA student clinical evaluation tools. Ability to foster a working relationship with clinical affiliates and practicing clinicians, including marketing, open communication verbally, technically, and onsite as needed. Open communications and reasonable availability to for assigned students in clinical fieldwork sites. Two or more years of clinical experience, supervision of OTA practitioners and fieldwork OTA students in Level I fieldwork. OTRL or COTAL current state licensure and national registration required.
OTAS-2590	Level 2 Fieldwork— Second Placement	Current working knowledge of current ACOTE fieldwork standards an OTA student clinical evaluation tools. Ability to foster a working relationship with clinical affiliates and practicing clinicians, including marketing, open communication verbally, technically and onsite as needed. Open communications and reasonable availability to for assigned students in clinical fieldwork sites. Two or more years of clinical experience, supervision of OTA practitioners and fieldwork OTA students in Level I fieldwork. OTRL or COTAL current state licensure and national registration required.

Physical Therapist Assistant

PTAS-1020	Physical Therapy Procedures 1 - Lecture	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care.
PTAS-1031	Physical Therapy Procedures 1- Laboratory	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care.
PTAS-1070	Joint Structure & Function - Lecture	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; continuing education in musculoskeletal anatomy or functional exercise prescription preferred.
PTAS-1081	Joint Structure & Function - Laboratory	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; special interest or continuing education in musculoskeletal anatomy or functional exercise prescription preferred.
PTAS-1091	Clinical Medicine for the Physical Therapist Assistant	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; special interest or continuing education in medicine and pharmacology preferred.
PTAS-1140	Life Span Development for PTA	PT or PTA with minimum of three years of clinical experience. Experience to include life span practice such as pediatrics or end of life care.

PTAS-1150	Kinesiology - Lecture	PT or PTA with minimum of 3 years of clinical experience. Experience to include acute care,subacute and or outpatientcare; continuing education in musculoskeletal anatomy or functional exercise prescription, DPT preferred
PTAS-1160	Kinesiology - Laboratory	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; continuing education in musculoskeletal anatomy or functional exercise prescription preferred. DPT Preferred
PTAS-1170	Physical Therapy Procedures 2 - Lecture	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; Experience to include development of therapeutic exercise programs for adult patients.
PTAS-1180	Physical Therapy Procedures 2 - Laboratory	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, sub-acute and/or outpatient care; Experience to include development of therapeutic exercise programs for adult patients.
PTAS-2110	Neuromuscular Physical Therapy - Lecture	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; Experience to include one year of evaluation and treatment of neurologically impaired patients. DPT preferred
PTAS-2120	Neuromuscular Physical Therapy - Laboratory	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; Experience to include one year of evaluation and treatment of neurologically impaired patients. DPT Preferred
PTAS-2130	Musculoskeletal Physical Therapy - Lecture	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; Experience to include one year of evaluation (PT), treatment of orthopedically impaired patients in an outpatient setting; if PTA, documented continuing education in orthopedics. DPT preferred
PTAS-2140	Musculoskeletal Physical Therapy - Laboratory	PT or PTA with minimum of three years of clinical experience. Experience to include acute care, subacute and/or outpatient care; Experience to include one year of evaluation (PT), treatment of orthopedically impaired patients in an outpatient setting; if PTA, documented continuing education in orthopedics. DPT preferred
PTAS-2190	Physical Therapy Procedures 3 - Lecture	PT or PTA with minimum three years of clinical experience. Experience to include one year of outpatient experience; Documented knowledge of electrotherapeutics.
PTAS-2200	Physical Therapy Procedures 3 - Laboratory	PT or PTA with minimum three years of clinical experience. Experience to include one year of outpatient experience; Documented knowledge of electrotherapeutics.
PTAS-2340	Clinical Internship1	PT or PTA with minimum of three years of clinical experience; Experience to include one year as a clinical instructor; Demonstrated ability/knowledge in marketing and community outreach; Experience in preferred PT/PTA relationships.
PTAS-2350	Clinical Internship2	PT or PTA with minimum of three years of clinical experience; Experience to include one year as a clinical instructor; Demonstrated ability/knowledge in marketing and community outreach; Experience in preferred PT/PTA relationships.

PTAS-2390	Clinical Internship3	PT or PTA with minimum of three years of clinical experience; Experience to include one year as a clinical instructor; Demonstrated ability/knowledge in marketing and community outreach; Experience in preferred PT/PTA relationships.
PTAS-2440	Rehabilitation Techniques - Lecture	PT or PTA with minimum of three years of clinical experience; Experience to include one year of evaluation (PT) and treatment of adult rehabilitation patients.
PTAS-2450	Rehabilitation Techniques - Laboratory	PT or PTA with minimum of three years of clinical experience; Experience to include one year of evaluation (PT) and treatment of adult rehabilitation patients.
PTAS-2460	Pediatrics	PT or PTA with minimum of three years of clinical experience; Experience to include one year of evaluation (PT) and treatment of pediatric patients.
PTAS-2470	Cardiopulmonary Rehabilitation	PT or PTA with a minimum of three years of clinical experience; Experience to include one year of evaluation(PT)/ treatment of acute, sub-acute or chronic cardiopulmonary patients or one year of cardiac rehabilitation experience.
PTAS-2500	Seminar for Physical Therapist Assistants	PT or PTA with a minimum of three years of experience; demonstrated knowledge of current issues in PT practice.
Respiratory Therapy		
RSPT-1050	Clinical Cardiorespiratory Physiologic Anatomy	(4) years of experience as a Registered Respiratory Therapist, RRT Credential, and Respiratory Therapy License for State of Michigan, and Math & science skills
RSPT-1060	Physiochemical Basis of Respiratory Therapy	(4) years of experience as a Registered Respiratory Therapist, RRT Credential, and Respiratory Therapy License for State of Michigan, and Math & science skills
RSPT-1085	Respiratory Therapy Procedures 1	(4) years of experience as a Registered Respiratory Therapist, RRT Credential, and Respiratory Therapy License for State of Michigan.
RSPT-1115	Respiratory Therapy Procedures 2	(4) years of experience as a Registered Respiratory Therapist, RRT Credential, Respiratory Therapy License for State of Michigan, and AHA Instructor credential.
RSPT-1140	Cardiopulmonary Pathology	(4) years of experience as a Registered Respiratory Therapist, RRT Credential, and Respiratory Therapy License for State of Michigan.
RSPT-1200	Cardiopulmonary Pharmacology	(4) years of experience as a Registered Respiratory Therapist, RRT Credential, and Respiratory Therapy License for State of Michigan.
RSPT-1210	Pediatric/Neonata l Respiratory Care	(4) years of experience as a Registered Respiratory Therapist, (2) years of experience in neonatal & pediatric Respiratory Therapy, RRT Credential and Respiratory Therapy License for State of Michigan. NPS credential recommended.
RSPT-1260	Clinical Internship1	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan.
RSPT-2250	Clinical Internship2	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan.
RSPT-2260	Clinical Internship 3	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan.

RSPT-2335	Mechanical Ventilation	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan. NPS and ACCS credential recommended
RSPT-2350	Acid-Base & Electrolyte Balance & Advanced Diagnostics	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan. CPFT credential recommended.
RSPT-2360	Clinical Internship 4	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan.
RSPT-2370	Clinical Internship 5	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan.
RSPT-2420	Advanced Concepts in Respiratory Care	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan. ACLS credential recommended
RSPT-2431	Certification & Registry Review	(4) years of experience as a Registered Respiratory Therapist, RRT Credential and Respiratory Therapy License for State of Michigan.
Surgical Technology		
SURG-1050	Introduction to Surgical Technology	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 2 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.
SURG-1051	Introduction to Surgical Patient Care Techniques	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying
SURG-1060	Orientation to Central Processing Distribution Technician	Certified Registered Central Service Technician (CRCST), or Certified Sterile Processing and Distribution Technician (CSPDT), with sterile processing experience. Minimum of 2 years current experience as a CRCST or CSPDT in the sterile processing department, or 3 years' experience as a surgical technology instructor.
SURG-1070	Central Processing Distribution Technician Clinical	Certified Registered Central Service Technician (CRCST), or Certified Sterile Processing and Distribution Technician (CSPDT), with sterile processing experience. Minimum of 2 years current experience as a CRCST or CSPDT in the sterile processing department, or 3 years' experience as a surgical technology instructor.
SURG-1200	Surgical Clinical1	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 3 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.

SURG-1250	Surgical Specialties 1	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 2 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.
SURG-1260	Surgical Pharmacology	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 2 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.
SURG-1300	Surgical Clinical 2	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 3 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.
SURG-1350	Surgical Specialties 2	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 2 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.
SURG-1360	Surgical Seminar	Associate of Applied Science degree. Certified Surgical Technologist (CST) or possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission of Certifying agencies (NCCA). Minimum of 2 years current experience as a CST in the scrub role, or as an instructor in surgical technology or both within the last 5 years.
Veterinary Technician		
VETT-1020	Applied Anatomy & Physiology - Lecture	Current working knowledge of anatomy and physiology as it applies to small animals. (Evidence must include CE attended in relevant subject(s)), Must be credentialed in the State of MI, either LVT or DVM
VETT-1030	Applied Anatomy & Physiology - Laboratory	Current working knowledge of anatomy and physiology as it applies to small animals. (Evidence must include CE attended in relevant subject(s)), Must be credentialed in the State of MI, either LVT or DVM
VETT-1040	Veterinary Practice & Communications	Current working knowledge of management principals and professional communication in a veterinary practice setting. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1060	Small Animal Techniques-- Laboratory	Current working knowledge of common small animal techniques. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM

VETT-1070	Advanced Small Animal Techniques-- Laboratory	Current working knowledge of common small animal techniques. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1080	Small Animal Techniques - Lecture	Current working knowledge of common small animal techniques. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1220	Veterinary Anesthesia - Lecture	Current working knowledge of various small animal anesthetic protocols, procedures, and anesthetic equipment. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1230	Veterinary Anesthesia - Laboratory	Current working knowledge of various small animal anesthetic protocols, procedures, and anesthetic equipment. (Evidence must include recent CE attended in relevant subject(s)) Full time faculty in Vet Tech program. Must be credentialed in the State of MI, either LVT or DVM
VETT-1300	Assisting in Veterinary Surgery - Lecture	Current working knowledge of common small animal surgical procedures and equipment. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1310	Assisting in Veterinary Surgery - Laboratory	Current working knowledge of common small animal surgical procedures and equipment. (Evidence must include CE attended in relevant subject(s)) Full time faculty in Vet Tech program. Must be credentialed in the State of MI, either LVT or DVM
VETT-1440	Clinical Pathology1 - Lecture	Current working knowledge of common laboratory procedures as it applies to small animals. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1450	Clinical Pathology1 - Laboratory	Current working knowledge of common laboratory procedures as it applies to small animals. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-1580	Veterinary Technician Internship 1	Program Director or his/her designee. Must be credentialed in the State of MI, either LVT or DVM
VETT-1700	Pharmacolo gy for Veterinary Technicians	Current working knowledge of common veterinary pharmaceuticals as it applies to small animals. (Evidence must include recent CE attended in relevant subject(s)). Full time faculty in Vet Tech program. Must be credentialed in the State of MI, either LVT or DVM
VETT-2050	Large Animal Techniques - Lecture	Current working knowledge of large animal techniques. (Evidence must include recent CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2060	Large Animal Techniques - Laboratory	Current working knowledge of large animal techniques. (Evidence must include recent CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2200	Small Animal Diseases	Current working knowledge of small animal diseases. (Evidence must include recent CE attended in relevant subject(s)) Full time faculty in Vet Tech program. Must be credentialed in the State of MI, either LVT or DVM

VETT-2320	Laboratory & Exotic Animal Techniques-- Lecture	Current working knowledge of laboratory & exotic animal techniques. Must be credentialed in the State of MI, either LVT or DVM
VETT-2330	Laboratory & Exotic Animal Techniques-- Laboratory	(Evidence must include recent CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2340	Advanced Laboratory & Exotic Animal Techniques— Laboratory	Current working knowledge of laboratory & exotic animal techniques. (Evidence must include recent CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM.
VETT-2470	Clinical Pathology2-Laboratory	Current working knowledge of laboratory procedures as it applies to small animals. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2480	Clinical Pathology 2 - Lecture	Current working knowledge of laboratory procedures as it applies to small animals. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2500	Large Animal Diseases	Current working knowledge of large animal diseases. (Evidence must include recent CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2580	Veterinary Technician Internship 2	Program Director or his/her designee. Must be credentialed in the State of MI, either LVT or DVM
VETT-2590	Veterinary Technician Capstone	Program Director or his/her designee. Must be credentialed in the State of MI, either LVT or DVM
VETT-2620	Radiology for Veterinary Technicians - Lecture	Current working knowledge of radiographic procedures as it applies to small animals. (Evidence must include CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM
VETT-2630	Radiology for Veterinary Technicians - Laboratory	Current working knowledge of radiographic procedures as it applies to small animals. (Evidence must include recent CE attended in relevant subject(s)). Must be credentialed in the State of MI, either LVT or DVM

Health Wellness and Exercise Science

WHES 1500	Basketball	Minimum Bachelor Degree in Physical Education, Exercise Science, Kinesiology and experience coaching or teaching baseball.
WHES-1510	Self Defense	Minimum Bachelor Degree in Physical Education, Exercise Science, Kinesiology, and experience in martial arts.
WHES-2000	Physical Fitness	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES- 2015	Nutrition	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2016	Exercise, Nutrition & Weight Management	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2022	Lifestyle, Behavior & Disease	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.

WHES-2024	Community & Environmental Health	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES- 2026	Healthy Lifestyle Choices for Future Health Care Providers	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES -2032	Cardio Group Fitness	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2036	Kickboxing	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2042	Strength Training & Health	Master's Degree in Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2050	Mental Health & Drugs	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2065	Biomechanics	Master's Degree in Physical Education, Exercise Science, Kinesiology, or 16 credits of Master's level courses.
WHES-2070	Prevention, Intervention, Treatment of Disease, Illness & Injury	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration, or 16 credits of Master's level courses as well as AHA BLS and Heart saver Instructor certification.
WHES-2072	Emergency Response	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration, or 16 credits of Master's level courses as well as AHA BLS and Heart saver Instructor certification.
WHES-2076	CPR/AED for the Professional Rescuer	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration, or 16 credits of Master's level courses as well as American Red Cross CPR/AED for the Professional Rescuer and First Aid Instructor certification.
WHES-2081	Introduction to Exercise Science	Master's Degree in Physical Education, Exercise Science, Kinesiology, or 16 credits of Master's level courses.
WHES-2082	Children, Exercise & Nutrition	Master's Degree in Physical Education, & Nutrition, Kinesiology, or 16 credits of Master's level courses.
WHES-2083	Introduction to Exercise Physiology	Master's Degree in Physical Education, Exercise Physiology, Kinesiology, or 16 credits of Master's level courses.
WHES-2085	Stress Management	Master's Degree in Public Health, Physical Education, Exercise Science,
WHES-2086	Health Promotion & Education	Master's Degree in Public Health, Physical Education, & Education, Kinesiology, Sports Administration, or 16 credits of Master's level courses.
WHES-2090	Exercise Leadership	Master's Degree in Physical Education, Exercise Science, Kinesiology, or 16 credits of Master's level course work.
WHES-2092	Foundations of Health & Wellness Coaching	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration. or 16 credits of Master's level course work as well as NBHWC NBC-HWC certification.
WHES-2094	Advanced Techniques for Health & Wellness Coaching	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration. or 16 credits of Master's level course

WHES-2096	Ethics, Legal Issues & Marketing for Health & Wellness Coaching	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration. or 16 credits of Master's level course work as well as NBHWC NBC-HWC certification.
WHES-2098	Health & Wellness Coaching Practicum	Master's Degree in Public Health, Physical Education, Exercise Science, Kinesiology, Sport Administration. or 16 credits of Master's level course work as well as NBHWC NBC-HWC certification.

INFORMATION TECHNOLOGY

Information Technology		
ITAP-1500 - Advanced MS Word	Application Professional	Valid Microsoft Office certification or 3 years extensive use of advanced features
ITAP-1600 - Advanced MS Excel	Application Professional	Valid Microsoft Office certification or 3 years extensive use of advanced features
ITAP-1700 - Advanced MS Access	Application Professional	Valid Microsoft Office certification or 3 years extensive use of advanced features
ITAP-2000 - Enterprise Content Management (ECM) Fundamentals	Application Professional	Working knowledge of Content Management Software, workflow, and business process management, archiving and document lifecycle management, and regulatory compliance; or industry certification and/or professional training. Working knowledge of MS SharePoint.
ITAP-2010 - Fundamentals of Electronic Records Management (ERM)	Application Professional	Working knowledge of roles and responsibilities of professional records managers, disaster crisis planning, capture and declaration, retention schedules, taxonomies, metadata, audit trails, and reference models; or industry certification and/or professional training
ITNC-1000 - CISCO Networking 1	Cisco Academy	Valid CCNA or CCNP, and Cisco Certified Academy Instructor (CCAI). certification. 3 years Industry experience. http://www.cisco.com/web/learning/netacad/get_involved/BecomeAnInstructor.html
ITNC-1020 - CCENT 1	Cisco Academy	Valid CCNA or CCNP, and Cisco Certified Academy Instructor (CCAI). certification. 3 years Industry experience
ITNC-1030 – CCENT 2	Cisco Academy	Valid CCNA or CCNP, and Cisco Certified Academy Instructor (CCAI). certification. 3 years Industry experience
ITNC-1100 - Cisco Networking 2	Cisco Academy	Valid CCNA or CCNP, and Cisco Certified Academy Instructor (CCAI). certification. 3 years Industry experience
ITNC-2000 - Cisco Networking 3	Cisco Academy	Valid CCNA or CCNP, and Cisco Certified Academy Instructor (CCAI). certification. 3 years Industry experience
ITNC-2100 - Cisco Networking4	Cisco Academy	Valid CCNA or CCNP, and Cisco Certified Academy Instructor (CCAI). certification. 3 years Industry experience
ITCS-1160 - Introduction to Oracle: SQL	Database	1 year experience with SQL Server, Oracle, or DB2, using SQL or industry certification and/or professional training
ITCS-1180 - Database Design Concepts	Database	3 years systems analyst experience performing analysis, design, creation, and/or administration of a large-scale relational database; or industry certification and/or professional training

ITCS-1170 - Database Design & Implementation Using SQL & XML	Database	3 years systems analyst experience performing analysis, design, creation, and/or administration of a large-scale relational database; or industry certification and/or professional training and 1 year experience with SQL Server, Oracle, or DB2, using SQL
ITCS 1950 Intro to Game Development	Gaming	3 years experience: electronic game development and Python development
ITCS 2000 ITCS Game Programming	Gaming	3 years experience: electronic game development and Direct X development
ITCS 2050 Advanced Game	Gaming	3 years experience: electronic game development, FLASH, and XNA
ITIA-1200 - Introduction to	Information Assurance	3 years information systems security experience. Networking experience. Knowledge and experience with security policy, devices, and
ITIA-1300 - Info Security Safeguards	Information Assurance	3 years information protection (policy writing) experience. Networking experience; or industry certification and/or professional training
ITIA-1400 - Building an Information Protection Program 3	Information Assurance	3 years information protection (policy writing) experience. Networking experience; or industry certification and/or professional training
ITIA-2300 - Information Systems Threat Assessment	Information Assurance	3 years system security and Networking experience. Experience with threat assessment and management; or industry certification and/or professional training
ITIA-2600 - Principles of Cryptography	Information Assurance	Cryptography experience. 3 years system security and networking experience; or industry certification and/or professional training
ITIA-2700 - Computer Forensics	Information Assurance	Computer forensics experience; or industry certification and/or professional training; 3 years system security and networking experience
ITCS 2335 Foundations of	IT Major	3 years IT technology implementation experience; minimum 2 years experience in two of the following areas: IT project management, RFP
ITNT-1500 - Principles of Networking	Network Administration	2 years networking experience in industry; or industry certification and/or professional training
ITNT-1600 - Introduction to Wireless	Network Administration	2 years wireless networking industry experience; or industry certification and/or professional training
ITNT-1700 - Wireless Network Integration	Network Administration	3 years wireless networking industry experience; or industry certification and/or professional training
ITNT-2130 - Network Design 1	Network Administration	2 years of networking experience in industry required. CCNA/CCDA a plus. Microsoft networking experience alone is not sufficient; or industry certification and/or professional training
ITNT-2911 - Introduction to Voice over IP	Network Administration	Valid CCNA certification. Telephony infrastructure knowledge; Cisco IP based voice packet telephony experience; or industry certification and/or professional training
ITNT-2912 - Deploying Voice over IP	Network Administration	Valid CCNA certification. CCNP a plus. Telephony infrastructure knowledge; Cisco IP based voice packet telephony experience; or industry certification and/or professional training

ITCS-1010 Computer & Info Proc Princ	Office	Valid Microsoft Office certification or extensive experience with intermediate level Office Suite (Word, Excel, Access, and PowerPoint) features; 2 years industry work experience using computer software,
ITCS-1400 Micros in Bus	Office	2 years working knowledge of the advanced level features of MS Word, Excel, Access, and PowerPoint. Industry work experience using
ITOS-1310 - Managing a Microsoft Windows Client Environment	Operating Systems	2 years MS Windows professional experience. MS certification; or industry certification and/or professional training
ITOS-1400 - Managing A MS Windows Server Environment	Operating Systems	2 years MS Certification. MS Windows Server 2008 or 2010 experiences; or industry certification and/or professional training
ITOS-1500 - Implementing Microsoft Windows Active Directory	Operating Systems	2 years MS Windows Active Directory experience. MS Certification; or industry certification and/or professional training
ITOS-1710 - Introduction to Linux	Operating Systems	2 years experience direct use and administration of LINUX/UNIX. Experience with the installation of any flavor of UNIX within a virtual server environment; or industry certification and/or professional training
ITOS-1720 - Linux Server Administration	Operating Systems	2 years experience direct use and administration of LINUX/UNIX. Experience with the installation of any flavor of UNIX within a virtual server environment; or industry certification and/or professional training
ITOS-2400 - Managing a Microsoft Windows Server Network	Operating Systems	MS Certification. 2 years management of MS Windows Server Networks experience; or industry certification and/or professional training
ITOS-2500 - Implementing & Managing	Operating Systems	MS Certification. 3 years implementation & management of MS Exchange Server experience; or industry certification and/or professional training
ITCS-1130 - Introduction to Program Design & Development	Programming	Programming, design, editing, coding, and debugging. 2 years program development experience with VB.NET or C++ or C# or Java; or industry certification and/or professional training
ITCS-1230 - Visual Basic Programming	Programming	2 years programming experience using VB.NET; or industry certification and/or professional training
ITCS-2200 Data Analysis	Programming	2 years working knowledge of advanced level features of Excel and Access and 2 years industry work experience using software for data analysis and data driven decision making or equivalent certification and/or professional training.
ITCS-2220 - Advanced Visual Basic	Programming	3 years experience programming using MS VB.NET, ASP.NET, ADO, and Visual Basic Web based applications; or industry certification and/or professional training
ITCS-2530 - C++ Programming 1	Programming	2 years experience as a programmer using C++; or industry certification and/or professional training
ITCS-2550 - C++ Programming 2	Programming	3 years experience as a programmer using C++.; or industry certification and/or professional training
ITCS-2590 - JAVA 1	Programming	2 years experience as a programmer using JAVA; or industry certification and/or professional training

ITCS-2620 - JAVA 2	Programming	3 years experience as a programmer using JAVA; or industry certification and/or professional training
ITCS 2830 Applications Implementation & Testing	Programming	3 years experience: large-scale software development; direct experience applications testing; application requirements gathering
ITWP-1000 – Intro to Web Programming	Web Programming	Web Programming using HTML, CGI. Applicants MUST have direct experience publishing web pages to the internet. Online certification preferred; or industry certification and/or professional training
ITWP 1050 Basic Web Design with Cascading	Web Programming	3 years experience: general web site development and direct use of cascading style sheets in website development; must be on-line certified
ITWP-1100 –	Web Programming	Web programming with JavaScript & Dynamic HTML. Applicants MUST
ITWP-1200 – Web	Web Programming	Web development with VBScript. CIW Application Developer 1D)-430 Certification preferred. Applicants MUST have direct experience using
ITWP-1600 – Web Security	Web Programming	Web Security experience. CIW Security Professional Certification preferred. Experience as a Site Security Administrator or upper-level
ITWP-2300 – Building Dynamic,	Web Programming	Web Based Solutions w/ASP.NET including ADO. Applicants MUST have direct experience using ADO in web pages they have published to
ITWP-2600 – Web Commerce (E-Commerce)	Web Programming	Web based e-Commerce experience. Development methodologies. Classic ASP.NET, DreamWeaver and/or FrontPage required. Successful implementation of eCommerce pedagogy in a real time environment preferred; or industry certification and/or professional training. Must be online certified.
ITWP-2700 – Programming: Perl	Web Programming	Perl knowledge. Web Languages Perl 1DO-435 CIW Certification preferred. Applicants MUST have direct experience using PERL in web pages they have published to the internet. Must be online certified.
ITWP-2750 – WEB Programming: PHP	Web Programming	PHP knowledge. Zend PHP Certification a plus. Applicants MUST have direct experience using PHP in web pages they have published to the internet. Must be online certified.
ITWP-2800 – Web Site Administration	Web Programming	Web Site Administration experience. I-Net certification or Basic CIW preferred. Applicants MUST have direct experience as WebMaster or assistant Web Master including basic understanding of networking and hardware as well as software required to manage and maintain a web server. Must be online certified.
ITML 1000 Microcomputer Literacy	Other	Motivational skills, experience with intermediate level Office Suite (Word, Excel, Access, and PowerPoint) features
ITBS-1000 - Computer Keyboarding	Other	Keyboarding, editing, basic computer knowledge
ITBS-1020 - Keyboard Speed Development	Other	Keyboarding, editing, motivational skills, basic computer knowledge

PUBLIC SERVICE

Emergency Medical Services

EMAS 1215	Basic EMT Lecture	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-1220	Basic EMT Lab	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-1250	Clinical Rotation for the Basic EMT	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2510	Introduction to Paramedic Procedures	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2520	Pharmacology for the Paramedic 1	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2530	Paramedic Lab 1	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2550	Paramedic Lecture 2	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA - 2605	Hospital Clinical skills	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA - 2611	Hospital Clinical Rotation I	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2560	Paramedic Lecture 3	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA - 2620	Paramedic Lecture 4	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2570	Pharmacology	Michigan License as a Paramedic, EMS Instructor Coordinator with 5
EMSA-2580	Paramedic Lab 2	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years experience. Associate's Degree required. Bachelor's Degree preferred.
EMSA-2600	Field Internship	Michigan License as a Paramedic, EMS Instructor Coordinator with 5
EMSA-2612	Hospital Clinical 2	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years' experience. Associate's degree required. Bachelor's Degree
EMSA-2620	Paramedic Lecture 4	Michigan License as a Paramedic, EMS Instructor Coordinator with 5 years' experience. Associate's degree required. Bachelor's Degree preferred.
EMSA-2700	Capstone: Integrated	Michigan License as a Paramedic, EMS Instructor Coordinator with 5
Fire Science		
FIRE 1010	Fundamentals ofFire	Demonstrated Fire Prevention Experience. Bachelor's Degree in a
FIRE 1020	Principles of Emergency Services	Demonstrated Fire Service experience. Bachelor's Degree in a related field.
FIRE 1110	Fire Behavior and Combustion	Demonstrated Fire Service experience. Fire Officer I, II, & III Certification. Bachelor's Degree in a related field.
FIRE 1120	Principles of Fire and Emergency Services Safety and Survival	Demonstrated Fire Service experience. Fire Officer I, II, & III Certification. Bachelor's Degree in a related field.

FIRE 2130	Fire Hydraulics & Water Supply	Demonstrated Fire Service Experience. Bachelor's Degree in a related field. Advanced training in Pump Operations preferred.
FIRE 2140	Fire Protection Systems	Demonstrated Fire Service Experience. Bachelor's Degree in a related field. Advanced training in Pump Operations preferred.
FIRE 2410	Building Construction for Fire Protection	Demonstrated Fire Prevention Experience. Bachelor's Degree in a related field. NFPA or ICC Certified Fire Inspector preferred.
FIRE 2420	Fire Investigation	Demonstrated Fire Investigation Experience. Bachelor's Degree in a related field. Fire Investigator Certification preferred.
Homeland Security		
HLND 1100	Introduction to Homeland Security	Demonstrated experience in related field. Bachelor's Degree in a related field.
HLND 1180		
HLND 1190	Border Security	Demonstrated experience in a related field. Bachelor's Degree in a related field.
HLND 2000	Intro to Emergency Management	Emergency Management experience. Professional Emergency Manger Certification (PEM) preferred. Bachelor's Degree in a related field.
Law Enforcement		
LAWE 1100	Criminal Justice	Demonstrated law enforcement experience. Bachelor's Degree in a related field.
LAWE 1120	Introductions to Corrections	Demonstrated law enforcement experience as it relates to Corrections. Bachelor's Degree in related field.
LAWE 1280	The Police Function	Demonstrated law enforcement experience. Bachelor's Degree in a related field.
LAWE 1290	Current Issues In Policing	Demonstrated law enforcement experience. Bachelor's Degree in a related field.
LAWE 1300	Police Field Study	Demonstrated law enforcement experience. Bachelor's Degree in a related field.
LAWE 1320	Interviewing	Demonstrated law enforcement experience as it relates to interrogation and interviewing. Bachelor's Degree in a related field.
LAWE 1400	Crime Causation	Demonstrated law enforcement experience. Bachelor's Degree in a related field.
LAWE-1410	Delinquency Prevention & Control	Demonstrated law enforcement experience as it relates to the juvenile justice system. Bachelor's Degree in a related field.
LAWE-1500	Analysis of Terrorism	Demonstrated law enforcement experience as it relates to Homeland Security and Terrorism. Bachelor's Degree in a related field.
LAWE 1600	Intro to Cyber Crime Investigation	Demonstrated law enforcement experience. Bachelor's Degree in a related field.
LAWE 2320	Police Leadership, Management and Supervision	Demonstrated law enforcement command experience. Bachelor's Degree in a related field.
LAWE 2330	Intro to Criminal Investigations	Demonstrated law enforcement experience as it relates to Criminal Investigations. Bachelor's Degree in a related field.
LAWE 2355	Crime scene Investigation	Demonstrated law enforcement experience in Forensic Science. Bachelor's Degree in a related field.
LAWE 2680	Evidence and Criminal Procedures	Juris Doctorate degree. Minimum 5 years law enforcement experience. Licensed to practice law in Michigan
LAWE 2690	Criminal Law	Juris Doctorate degree. Minimum 5 years law enforcement experience. Licensed to practice law in Michigan

LAWE 2700	Advanced Court Procedures	Demonstrated law enforcement experience as it relates to Criminal Investigations. Bachelor's Degree in a related field.
Security Administration		
SECR 1000	Intro to Security	Demonstrated law enforcement experience as it relates to the security industry. Bachelor's Degree in a related field.
SECR 1120	Principles of Loss Prevention	Demonstrated law enforcement experience as it relates to loss prevention. Bachelor's Degree in a related field.