TAB H

Board of Trustees
Washtenaw Community College

4800 E. Huron River Drive
Ann Arbor, Michigan 48105-4800

Subject   Date
Recommendation for New Programs for 2021-22   February 23, 2021
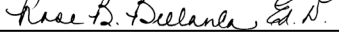
RECOMMENDATION

That the Board of Trustees approve the New Programs for Fall 2021 as listed below:

❈ Supply Chain Essentials Certificate of Completion – Business & Computer Technologies Division - Business Department

❈ Principles of Cybersecurity Advanced Certificate – Business & Computer Technologies Division- Computer Science and Information Technology Department

❈ Cybersecurity Operations Advanced Certificate – Business & Computer Technologies Division- Computer Science and Information Technology Department

❈ Cardiac Telemetry Technician Certificate of Completion - Health Sciences Division – Health Science Department

❈ Health Administration Associate in Science – Health Sciences Division – Health Science Department

❈ Arts Management Certificate - Humanities, Social and Behavioral Science Division - Humanities, Languages and the Arts Department

A ROLL CALL VOTE WILL BE TAKEN

Prepared by: Dr. Kimberly Hurns   Recommended by: _Rose B. Bellanca, Ed.D._
Title: Executive Vice President for   Rose B. Bellanca, President
                 For Instruction & Academic Affairs

Recommendation for New Programs for 2021-2022

Supply Chain Essentials
Certificate of Completion – 6 credits
Business and Computer Technologies Division
Business Department

Description: This certificate of completion is designed for individual working in the industry who are seeking advancement in their field. This program is embedded in the supply chain certificate and associate of applied science degree programs. Completion of the certificate program will prepare the student to take two industry approved certification exams. The exams are the Certified Logistics Association Certification (CLA) and the Certified Logistics Technician Certification (CLT).

Need/Job Demand: The two classes being offered for this certificate of completion will allow students the opportunity to build their resume and pursue the complete program in Supply Chain Management. Upon completion of the two classes, students will be put in place to achieve two certifications of completion in the supply chain industry. This is a consistently growing area of business showing above average job growth in the future. Median earnings for positions in supply chain and its related field of logistics, $66k, is also above average. Job opportunities can be obtained with experience and limited coursework (certificate).

Student Learning Outcomes:

1. Identify the supply chain ecosystem including the players, their roles, and corporate social responsibility.
2. Identify and apply the processes and practices needed in warehouse operations.

Curriculum Review: The Curriculum and Assessment Committees recommended approval of this program on 1/21/21.

Wage Data: In 2019, the median wage for positions in supply chain and its related field of logistics was $66,000 annually,

Program Requirements:

Course	Title	Credits
BMG 181	Introduction to Supply Chain Management	3
BMG 182	Warehousing and Logistics	3
	Total	6

Recommendation for New Programs for 2021-2022

Principles of Cybersecurity
Advanced Certificate – 13 credits
Business & Computer Technologies Division
Computer Science and Information Technology Department

Description: This program is designed to meet the emerging demand for highly skilled cybersecurity professionals within the information technology industry and business community. This certificate program provides an in-depth examination of cybersecurity technology with an emphasis on executing a vulnerability analysis of an organization network and network hardening. The student will be trained to use various tools to analyze networks for vulnerabilities and secure networks through the application of various defense mechanisms including firewalls, intrusion detection and Virtual Private Networks (VPN).

Need/Job Demand: The Cybersecurity profession is expected to grow faster than average, at a rate of 5% to 7%. This proposal changes the Principles of Cybersecurity certificate to an advanced certificate that recognizes the need for prerequisite knowledge and skills.

Student Learning Outcomes:

1. Apply knowledge and skills to install, configure and manage identity and access services when implementing and administering a secure network architecture.
2. Demonstrate test-takings strategies that will prepare the student for the CompTia Security+ certification exam.

Curriculum Review: The Curriculum and Assessment Committees recommended approval of this program on 2/4/21.

Wage Data: In 2019, the median wage for an Information Security Engineer was $42.57 per hour or $88,550 annually,

Program Requirements:

Course	Title	Credits
CSS 200	Introduction to Network Security - Security+	4
CSS 205	Essentials of Network Penetration Testing	4
CSS 210	Network Perimeter Protection - CCNA Security	4
CSS 295	Cybersecurity Industry Certification: COMPTIA SEC+	1
	Total Credits	13

Recommendation for New Programs for 2021-2022

Cybersecurity Operations
Advanced Certificate – 13 credits
Business & Computer Technologies Division
Computer Science and Information Technology Department

Description: In this program, students will develop the knowledge and skills associated with monitoring, detecting, investigating, analyzing and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats and vulnerabilities. Students will prepare for the Cisco CCNA Cyber Operations Associate Examination.

Need/Job Demand: The Cybersecurity profession is expected to grow faster than average, at a rate of 5% to 7%. This proposal changes the Principles of Cybersecurity certificate to an advanced certificate that recognizes the need for prerequisite knowledge and skills.

Student Learning Outcomes:

1. Demonstrate the knowledge and skills required to monitor and analyze network traffic, host-based attacks and network intrusions.
2. Demonstrate test-taking strategies that will prepare the student for the Cisco CCNA Cyber Operations Associate Examination.

Curriculum Review: The Curriculum and Assessment Committees recommended approval of this program on 2/4/21.

Wage Data: In 2019, the median wage for an Information Security Engineer was $42.57 per hour or $88,550 annually,

Program Requirements:

Course	Title	Credits
CPS 141	Python	4
CSS 225	Cybersecurity Operations – CCNA Cyber Ops	4
CNT 290	Network Forensics	4
CSS 296	Cybersecurity Operations Certification Preparation	1
	Total Credits	13

Cardiac Telemetry Technician
Certificate of Completion – 6 credits
Health Sciences Division – Health Science Department

Description: Students in this program learn the skills required to become Cardiac Telemetry Technicians. Cardiac Telemetry Technicians are health professionals responsible for measuring and reporting the patient's heart rhythm and rate. Students will learn to ensure proper electrode placement on the patient, record the ECG and measure, interpret and report Electrocardiogram (ECG) wave form results to the nursing staff and physician. Upon successful completion of the certificate, students will also be eligible to take the National Certification Electrocardiogram (ECG) Exam.

Need/Job Demand: In January 2020, WCC was contacted by both Michigan Medicine and Trinity Health inquiring about the possibility of developing a training program for Cardiac Telemetry Monitoring. The hospitals have agreed to provide clinical training to WCC Cardiac Telemetry students.

Student Learning Outcomes:

1. Identify cardiac anatomy.
2. Read and interpret cardiac rhythm strips by identifying common cardiac rhythms and arrhythmias.
3. Differentiate severity of arrhythmia blocks.

Curriculum Review: The Curriculum and Assessment Committees recommended approval of this program on 11/18/20.

Wage Data: The 2019 median wage was $27.75 hourly or $57,720 annually.

Program Requirements:

Course	Title	Credits
HSC 131	CPR/AED and First Aid	1
HSC 140	Cardiac Telemetry Monitoring	5
	Total Credits	6

Recommendation for New Programs for 2021-2022

Health Administration
Associate in Science – 60 credits
Health Sciences Division – Health Science Department

Description: The Health Administration program provides students with the skills necessary for entry-level employment in healthcare management. Students in this industry lead and oversee the operation of complex health care entities including, hospitals, outpatient facilities, health care systems, pharmacies, long-term care facilities, mental health centers, fitness centers insurance companies, schools and public health systems. Upon completion of this associate degree, the student should be able to: understand medical terminology, apply health care knowledge in economic analysis, accounting, and effectively communicate with team members.

Need/Job Demand: Local employer groups (St. Joseph Mercy-Ann Arbor, Michigan Medicine) require an Associate Degree for some supervisory positions. Employment in healthcare occupations is projected to grow 15 percent from 2019 to 2029, much faster than the average for all occupations, adding about 2.4 million new jobs. Healthcare occupations are projected to add more jobs than any of the other occupational groups. This projected growth is mainly due to an aging population, leading to greater demand for healthcare services.

U.S. Bureau of Labor Statistics

Student Learning Outcomes:

1. Evaluate accounting information to assess a company's performance and determine its ability to pay off its liabilities.
2. Manipulate supply and demand models to determine qualitative and quantitative changes in prices, output, allocative efficiency and economic surplus that result from real-world events and government policy change.
3. Prepare a healthcare practice proposal in the form of a presentation, publication or poster, based on the evidence-based practice process (EBP).

Curriculum Review: The Curriculum and Assessment Committees recommended approval of this program on 1/21/21.

Wage Data: The 2019 median wage was $48.55 hourly or $100,980 annually.

Recommendation for New Programs for 2021-2022

Program Requirements:

1st Semester			
Class		*Title*	*Credits*
BIO 111	or	Anatomy and Physiology-Structure and Function	
BIO 109		Essentials of Human Anatomy and Physiology	4 - 5
Elective		Writing/Composition	3 - 4
Elective		Social Science (Not ECO)	3
MTH 160	or	Basic Statistics	
		Any Math Level 4 or higher	3 - 4
Total			13 - 16

2nd Semester			
Class		*Title*	*Credits*
Elective		2nd course in Writing/Composition or Communication	3
ECO 211		Principles of Economics I	3
Elective		Natural Science (not BIO)	3 - 4
PHL 244		Ethical and Legal Issues in Health Care	3
Electives		*Restricted Electives	2
Total			14 - 15

3rd Semester			
Class		*Title*	*Credits*
ECO 222		Principles of Economics II	3
ACC 111		Accounting 111	3
HSC 124		Medical Terminology	3
HSC 103	or	Healthcare Exploration	
HSC 100	or	Basic Nursing Assistant Skills	
HSC 165	or	Foundations of Caregiving	
RAD 100		Introduction to Diagnostic Imaging	1 - 4
HSC 147	or	Growth and Development	
PSY 206		Life Span Development Psychology	3 - 4
HSC 131		CPR/AED/First Aid	1
Total			14 - 18

4th Semester			
Class		*Title*	*Credits*
HSC 256 **		Health Clinical Experience	2
HSC 257		Evidence-Based Practice in Action	3
Elective		Arts and Humanities	3
Electives *		Restrictive Electives needed to complete 60 cr. Hours	3 - 11
Total			11-19
		Total Credits	**60**

Footnotes:

*Restrictive Electives - Student's will be referred to an advisor and advisors will be provided with a list of programs/courses such as HLT Certificates and Associate Degrees, Computer Software Applications (CTCSSC) courses or Human Resource Management (CTHRMG) courses.

**Clinical Experience - Students who have experience working in a clinical healthcare setting may request credit through a portfolio evaluation. Please contact advisors for additional information.

Arts Management
Certificate – 21 - 25 credits
Humanities, Social and Behavioral Science Division
Humanities, Languages and the Arts Department

Description: This program is designed to provide students desiring a creative lifestyle the entrepreneurial, management and social media skills needed to both create a sustainable plan for their own artistic skills, as well as access to become a management or creative social media asset to various businesses such as profit, non-profit and creative/artistic.

Need/Job Demand: Musicians, dancers, actors, and visual artists, media, and creative individuals, have no career pathway to subsidize their craft or develop credentials that maximize their creativity in a real work context. Of the top 100 careers with "Bright Outlooks" on www.onetonline.org – 15 specify the requirements of creativity, arts or event management, marketing, social media marketing, training or development.

Student Learning Outcomes:

1. Create and execute a media marketing campaign for an external client in the arts discipline of their choice.
2. Present their campaign to the class.

Curriculum Review: The Curriculum and Assessment Committees recommended approval of this program on 1/21/21.

Wage Data: Students can make anywhere from $20 - $150 per hour in an arts marketing/social media career.

First Semester		
Class	Title	Credit Hours
MUS 180	Music Appreciation: Our World	
or HUM 181	World Cultures Creativity Forum	3
Rest. Elect.	HLA or Specialty Restricted Electives	2-4
MUS 285	Self-Management for Working Artists	
or ART 295	Self-Management for Working Artists	3
BMG 250	Principles of Marketing	3
Total		11-13
Second Semester		
BMG 155	Business & the Internet	
or BMG 168	Facilities and Event Management	3
Elective	COM 150 or VID 105 or AUD 170	3
Rest. Elect.	HLA or Specialty Restricted Electives	2-4
ART 295	Arts Management Capstone	
or MUS 295	Arts Management Capstone	2
Total		10-12
	Total	21 - 25

Restricted electives may include:
Art: ART 101, 108, 111, 112, 114, 122, 125, 127, 129
Ceramics: ART 121, 128
Music: MUS 105, 133, 140, 147, 154, 204, 205
Dance: DAN 107, 108, 111, 180
Drama: DRA 152, 180, 204, 208, 211
Film: FLM 120, 150, 160, 185
Humanities: ART 130, 131, 143, 150, HUM 101, 102, 103, 145, 146, or PHL 205
Foreign Languages: Any ARB, CHN, FRN, GRM, SPN
Photography: PHO 103, 111, 117, 127