



April 15, 2019

MEMORANDUM

TO: District Board of Trustees
FROM: Jim Murdaugh, President 
SUBJECT: Academic Curriculum Changes

Item Description

This item presents proposed new programs, program changes, new courses, new course fees, and course changes.

Overview and Background

The Academic Planning Committee Curriculum members review and make recommendations for Board approval for new program and courses. Due to changes by the State Board of Education as well as the revision of programs to meet workforce demands, there are several changes that are being proposed.

The College is proposing two new Career and Technical programs: Welding Technology and Medical Administrative Specialist. The curriculum for the Welding program was revised by Florida's Department of Education resulting in a new program with new courses. There is a projected 4.7% growth for the region of Leon, Gadsden, and Wakulla and 20% growth for the state of Florida. The median wage for welders is \$18.32 per hour in the state of Florida according to the Department of Economic Opportunity. There are course fees associated with the new courses for this program and the program is proposed to begin Summer 2019.

The Medical Administrative Specialist program is proposed to be offered at the Wakulla Center. The program has a projected 19.9% growth for the region of Leon, Gadsden, and Wakulla and a median wage of \$13.27. The program is pending SACSCOC approval, and is proposed to begin Spring 2020.

Additionally, TCC is proposing a new college credit certificate in Network Security: Cyber Forensics. The new program has a projected growth of 25.8% for the state of Florida and median hourly wage is \$39.73. Cyber Florida has projected 1.5 million unfilled jobs nationwide in the area of Cyber Security due to a lack of qualified candidates. There are course fees associated with the new courses for this program. The new certificate is scheduled to begin in Fall 2019.

We are also proposing changes to the AS degree in Business Management to include a Risk Management and Insurance specialization. This change will allow students to receive up to three Florida insurance licenses upon earning an associate's degree without having to complete the state exams. The specialization is scheduled to begin in Fall 2019.

Past Actions by the Board

The Board approves the new programs, program changes, new courses, new course fees, and course changes each year.

Funding/Financial Implications

Curriculum changes require no new funding.

Staff Resource

Feleccia Moore-Davis

Recommended Action

That the Board approves the recommendation for new programs, program changes, new courses, new course fees, and course changes as attached.

NEW PROGRAMS

Welding Technology, Career and Technical Certificate (1,050 clock hours) (effective Summer 2019)

Florida's Department of Education required the content to change in the Welding program prompting TCC to end the current Welding program and develop a new program. The curriculum changes require 5 new courses for the Welding program. The total program clock hours does not change. There is a projected 4.7% growth for the region of Leon, Gadsden, and Wakulla and 20% growth for the state of Florida. The median wage for welders is \$18.32 per hour in the state of Florida according to the Department of Economic Opportunity. There are course fees associated with the new courses for this degree.

Program Courses:

PMT0070	Welder Assistant I (150)
PMT0071	Welder Assistant II (150)
PMT0072	Welder Shielded Metal Arc Welder (SMAW) 1 (150)
PMT0073	Welder Shielded Metal Arc Welder (SMAW) 2 (150)
PMT0074	Welder (450)

Medical Administrative Specialist Career and Technical Certificate (1,050 clock hours) (effective after SACSCOC approval)

This career and technical certificate will provide opportunities students to obtain careers as information technology assistants, front desk specialists, medical office technologists, medical secretaries, and medical administrative specialists. There is a projected 19.9% growth for the region of Leon, Gadsden, and Wakulla. The median hourly wage is \$13.27 according to the Department of Economic Opportunity. This program will be offered at the Wakulla Center. There are certifications associated with this program and there are lab fees associated with the new courses.

Program Courses:

OTA0040	Information Technology Assistant (150)
OTA0041	Front Desk Specialist (300)
OTA0631	Medical Office Technologist (300)
OTA0651	Medical Administrative Specialist (300)

Network Security: Cyber Forensics College Credit Certificate (30 credit hours) (effective Fall 2019)

There is a growing demand where businesses are in need of talent to protect their infrastructure and data as well as to conduct cyber forensic investigations. According to Cyber Florida, which is a state funded organization dedicated to positioning Florida as a national leader in cybersecurity through education and workforce development, there were 209,000 cybersecurity jobs in the U.S. that went unfilled in 2015. That number is projected to have grown in 2019 to 1.5

million unfilled due to a lack of qualified candidates. The projected job growth for the state of Florida is 25.8% and the median hourly wage is \$39.73 according to the Department of Economic Opportunity. There are industry certifications for this program and course fees associated with the new courses for this degree.

Program Courses:

CGS1000	Introduction to Computer Technology (3)
CNT2401	Introduction to Network Security (3)
CIS2352	Ethical Hacking (3)
CTS2114	Network Defense and Counter Measures (3)
CIS2381	Computer Hacker Forensic Investigator (3)
CTS1134	Network and Telecommunication (3)
CTS2352	Advanced Network Administration (3)
CET1600	Open System Architecture I (3)
CET1610	Open System Architecture II (3)
COP1000	Programming Concepts or COP equivalent (3)

PROGRAM CHANGES

Computer Programming and Web Development, A.S. (60 credit hours) (effective Summer 2019)

Based on recommendations for local employers on the Computer Programming Advisory Board, TCC is proposing to add a new programming language, Introduction to Python Programming. The course will provide students with skills for developing desktop and web applications.

Add this course:

COP1000 Introduction to Python Programming (3)

Delete this course:

COP1332 Introduction to VB.Net Programming (3)

Computer Programming Specialist Certificate (18 credit hours) (effective Summer 2019)

Based on recommendations for local employers on the Computer Programming Advisory Board, TCC is proposing to add a new programming language, Introduction to Python Programming. The course will provide students with skills for developing desktop and web applications.

Add this course:

COP1000 Introduction to Python Programming (3)

Delete this course:

COP1332 Introduction to VB.Net Programming (3)

Computer Programming and Analysis Certificate (33 credit hours) (effective Summer 2019)

Based on recommendations from local employers on the Computer Programming Advisory Board, TCC is proposing to add a new programming language, Introduction to Python Programming. The course will provide students with skills for developing desktop and web applications.

Add this course:

COP1000 Introduction to Python Programming (3)

Delete this course:

COP1332 Introduction to VB.Net Programming (3)

Network System Technology (60 credit hours) (effective Summer 2019)

Based on recommendations from local employers on the Network Systems Advisory Board, TCC is proposing to delete courses and new courses to reflect the changing landscape for the field of information technology.

Add courses:

COP1000 Programming Concepts (3)
CIS2381 Computer Hacker Forensic Investigator (3)
CTS2114 Network Defense Counter Measures (3)
CTS2311 Introduction to Linux (3)

Delete courses:

CGS1060 Computer Internet and Literacy (3)
CET2370 Network Virtualization (3)
CTS2352 Advanced Network Administration (6)

Business Management, A.S. (60 credit hours) (effective Summer 2019)

Based on feedback from the local community, TCC is proposing to add a specific track to the existing AS program to give students a specialization in risk management and insurance. Students seeking insurance specialization, will be able to receive up to 3 Florida insurance licenses (Resident Customer Representative, Resident Personal Lines Agent, and Resident Life and Health Agent) without having to complete the state exams with the current AS degree in Business Management.

Add courses:

RMI2662 Introduction to Risk Management and Insurance (3)
RMI2110 Personal Insurance (3)
RMI2212 Personal Business and Property Insurance (3)

College and University Transfer, A.A. (60 credit hours) (effective Fall 2019)

TCC is proposing to revise the Science general education structure within the AA degree. To further streamline students completing the AA degree, students will no longer be required to take two science courses from different disciplines (i.e. biological, earth, and physical sciences). Students will take one state core and one TCC core science class in order to satisfy the AA graduation requirement.

PROGRAM DELETIONS

Based on review of curriculum content and assessment, the following program deletions are recommended due to job decline within the industry.

- Network Enterprise Administration Certificate (29 credit hours)
- Network Virtualization Certificate (18 credit hours)

NEW COURSES

Course ID	Course Name	New Course Fee	Rationale for Course Fee	Rationale for New Course
PMT0070	Welder Assistant 1	\$150	Gas (acetylene), Metal (steel and iron), grinding wheels, wire wheels	New course for new Welding program
PMT0071	Welder Assistant 2	\$225	Welding rods, Gas (acetylene), Metal (steel and iron), grinding wheels, wire wheels and feed wire for welding machines	New course for new Welding program
PMT0072	Welder, SMAW 1	\$225	Welding rods, Gas (acetylene), Metal (steel and iron), grinding wheels, wire wheels and feed wire for welding machines	New course for new Welding program
PMT0073	Welder, SMAW 2	\$225	Welding rods, Gas (acetylene), Metal (steel and iron),	New course for new Welding program

			grinding wheels, wire wheels and feed wire for welding machines	
PMT0074	Welder	\$225	Welding rods, Gas (acetylene), Metal (steel and iron), grinding wheels, wire wheels and feed wire for welding machines	New course for new Welding program
CTS2311	Introduction to Linux	\$0		New course for the Network System Technology AS to prepare students for the Certified Ethical hacker exam.
CTS2123	Network Defense and Countermeasures	\$305	Software to practice security mechanisms.	New course for the new Cyber Security CCC
CIS2381	Computer Hacker Forensic Investigator	\$372.50	Lab software to practice hacking techniques.	New course for the new Cyber Security CCC
RMI2662	Introduction to Risk Management and Insurance	\$0		New course for Risk Management Insurance Specialization with the Business Management A.S.
RMI2110	Personal Insurance Planning	\$0		New course for Risk Management Insurance Specialization with the Business Management A.S.
RMI2212	Personal and Business Property Insurance	\$0		New course for Risk Management Insurance Specialization with the Business Management A.S.
OTA0040	Information Technology Assistant	\$0		New course for Medical Administrative Specialist CTC
OTA0041	Front Desk Specialist	\$0		New course for Medical Administrative Specialist CTC
OTA0631	Medical Office Technologist	\$0		New course for Medical Administrative Specialist CTC
OTA0651	Medical Administrative Specialist	\$0		New course for Medical Administrative Specialist CTC

COURSE DELETIONS

Course ID	Course Name	Rationale for Course Deletion
PMT0106	Introduction to Oxyacetylene Welding	This course is recommended for deletion based on creation of new Welding program
PMT0121	Shielded Metal Arc Welding	This course is recommended for deletion based on creation of new Welding program
PMT0126	Advanced Shielded Metal Arc Welding	This course is recommended for deletion based on creation of new Welding program
PMT0112	Advanced Specialty Oxyacetylene Welding	This course is recommended for deletion based on creation of new Welding program
PMT0122	Shielded Metal Arc Welding High Technology Skills	This course is recommended for deletion based on creation of new Welding program
PMT0130	Introduction to MIG	This course is recommended for deletion based on creation of new Welding program
PMT0131	TIG Welding	This course is recommended for deletion based on creation of new Welding program
PMT0134	MIG Welding	This course is recommended for deletion based on creation of new Welding program
PMT0138	Specialty TIG	This course is recommended for deletion based on creation of new Welding program
PMT0145	GMAW Flux Core Arc Welding	This course is recommended for deletion based on creation of new Welding program
PMT0164	Fabrication of Metal Products using Shielded Metal Arc Welding	This course is recommended for deletion based on creation of new Welding program
CET2370	Network Virtualization	Course no longer needed due changes in industry standards.
CTS2352	Advanced Network Administration	Course no longer needed due changes in industry standards.