




January 17, 2012

MEMORANDUM

TO: District Board of Trustees

FROM: Jim Murdaugh, President 

SUBJECT: Science, Technology, Engineering, and Mathematics (STEM) Center of Excellence

Item Description

This item requests that the Board approve amendments to the interinstitutional agreements with the school districts in our county and provides the opportunity for staff to describe current programs and immediate plans to move TCC to a position of being a Center of Excellence for STEM education.

Overview and Background

TCC is already known for many excellent programs associated with educating students in the STEM areas, including federal and private grant funding as well as scholarship opportunities. To move to a higher level of achievement, TCC is forming a TCC STEM Council that will bring together the diverse elements already in place as well as develop significant new opportunities. In addition, TCC is strengthening its relationship with the local school districts in order to recruit more students into STEM fields.

Past Actions by the Board

The Board approved the Articulation Agreements at the August, 2011 Board meeting.

Funding/Financial Implications

No new funding is being requested at this time. TCC is leveraging grant and scholarship funds currently available and reassigning individuals as appropriate. TCC is designating \$20,000 to district high school graduates who meet criteria for studying in STEM areas.

Staff Resource

Barbara Sloan

Recommended Action

That the Board approve the amendments to the Interinstitutional Articulation Agreements.

Amendment to
INTERINSTITUTIONAL ARTICULATION AGREEMENT
BETWEEN
Tallahassee Community College
AND
Gadsden County Schools
2011-12

In recognition of the continued need to identify talented students interested in Science, Technology, Engineering, and Mathematics (STEM) and in order to provide these students with local opportunities to explore careers and to major in STEM areas, Tallahassee Community College and Gadsden County Schools do hereby amend their Interinstitutional Articulation Agreement to include the following in Part II (Joint Programs and Agreements), Section B (Curriculum):

Tallahassee Community College and Gadsden County Schools will develop a joint council of teachers and other appropriate personnel who will focus on generating interest in STEM among K-12 students, recruit STEM students into high school and TCC STEM programs, expand and promote K-12 pathways that articulate into TCC degrees, and provide other support as determined to market programs and recruit talented students into STEM areas.

Specifically, Tallahassee Community College and Gadsden County Schools will promote the high school programs and college degrees identified by the Florida Department of Education as programs that lead directly to STEM occupations or are included in a career path that leads to a STEM occupation identified through national and state research and labor market information. (Current list available in the TCC service district is attached.)

In addition, Tallahassee Community College will provide scholarship opportunities for students who participate in these programs. Scholarship criteria include the following:

- high school GPA of 3.0 or higher,
- enrollment in or completion of a high school STEM Career & Technical program, or
- completion of high school math and science courses related to STEM
- commitment to a STEM degree area
- recommendation from a high school math or science teacher and guidance counselor

Date

Chair, The District Board of Trustees,
Tallahassee Community College, Florida

Date

President, Tallahassee Community College

Date

Chair, Gadsden County School Board

Date

Superintendent, Gadsden County School District

Amendment to
INTERINSTITUTIONAL ARTICULATION AGREEMENT
BETWEEN
Tallahassee Community College
AND
Leon County Schools
2011-12

In recognition of the continued need to identify talented students interested in Science, Technology, Engineering, and Mathematics (STEM) and in order to provide these students with local opportunities to explore careers and to major in STEM areas, Tallahassee Community College and Leon County Schools do hereby amend their Interinstitutional Articulation Agreement to include the following in Part II (Joint Programs and Agreements), Section B (Curriculum):

Tallahassee Community College and Leon County Schools will develop a joint council of teachers and other appropriate personnel who will focus on generating interest in STEM among K-12 students, recruit STEM students into high school and TCC STEM programs, expand and promote K-12 pathways that articulate into TCC degrees, and provide other support as determined to market programs and recruit talented students into STEM areas.

Specifically, Tallahassee Community College and Leon County Schools will promote the high school programs and college degrees identified by the Florida Department of Education as programs that lead directly to STEM occupations or are included in a career path that leads to a STEM occupation identified through national and state research and labor market information. (Current list available in the TCC service district is attached.)

In addition, Tallahassee Community College will provide scholarship opportunities for students who participate in these programs. Scholarship criteria include the following:

- high school GPA of 3.0 or higher,
- enrollment in or completion of a high school STEM Career & Technical program, or
- completion of high school math and science courses related to STEM
- commitment to a STEM degree area
- recommendation from a high school math or science teacher and guidance counselor

Date

Chair, The District Board of Trustees,
Tallahassee Community College, Florida

Date

President, Tallahassee Community College

Date

Chair, Leon County School Board

Date

Superintendent, Leon County School District

Amendment to
INTERINSTITUTIONAL ARTICULATION AGREEMENT
BETWEEN
Tallahassee Community College
AND
Wakulla County Schools
2011-12

In recognition of the continued need to identify talented students interested in Science, Technology, Engineering, and Mathematics (STEM) and in order to provide these students with local opportunities to explore careers and to major in STEM areas, Tallahassee Community College and Wakulla County Schools do hereby amend their Interinstitutional Articulation Agreement to include the following in Part II (Joint Programs and Agreements), Section B (Curriculum):

Tallahassee Community College and Wakulla County Schools will develop a joint council of teachers and other appropriate personnel who will focus on generating interest in STEM among K-12 students, recruit STEM students into high school and TCC STEM programs, expand and promote K-12 pathways that articulate into TCC degrees, and provide other support as determined to market programs and recruit talented students into STEM areas.

Specifically, Tallahassee Community College and Wakulla County Schools will promote the high school programs and college degrees identified by the Florida Department of Education as programs that lead directly to STEM occupations or are included in a career path that leads to a STEM occupation identified through national and state research and labor market information. (Current list available in the TCC service district is attached.)

In addition, Tallahassee Community College will provide scholarship opportunities for students who participate in these programs. Scholarship criteria include the following:

- high school GPA of 3.0 or higher,
- enrollment in or completion of a high school STEM Career & Technical program, or
- completion of high school math and science courses related to STEM
- commitment to a STEM degree area
- recommendation from a high school math or science teacher and guidance counselor

Date

Chair, The District Board of Trustees,
Tallahassee Community College, Florida

Date

President, Tallahassee Community College

Date

Chair, Wakulla County School Board

Date

Superintendent, Wakulla County School District

High School STEM Career and Technical Programs

- Computer Programming
- Digital Design
- Electronics Engineering Technology
- Information Technology
- Networking
- PC Support
- Web Design
- Building Construction and Engineering Technology
- Networking or PC Support
- Communications Technology
- Electronic Technology
- Computer Systems
- Academy of Architecture, Engineering, and Construction
- Media Production

TCC STEM Certificate and AS degree programs:

- Certificate in Alternative Energy Systems Specialist
- Certificate in CNC Machinist
- Certificate in Composite Fabrication and Testing
- Certificate in Electronics Aide
- Certificate in Lean Six Sigma Green Belt
- Certificate in Pneumatics, Hydraulics & Motors for Manufacturing
- Certificate in Computer Programming and Analysis
- A.S. Degree in Computer Programming and Analysis – Computer Game Design & Logic
- Certificate in Computer Programming Specialist
- A.S. Degree in Help Desk/Technical Support
- Certificate in Help Desk/Technical Support
- Certificate in Information Technology Technician
- Certificate in Information Technology Management
- Certificate in Networking Services Technology
- A.S. Degree in Networking Services Technology
- A.S. Degree in Web Technologies
- Certificate in Web Technologies
- A.S. Degree in Criminal Justice Technology with Crime Scene Investigation Specialization
- A.S. Degree in Biotechnology
- A.S. Degree in Civil Engineering Technology
- Certificate in Computer-Aided Drafting and Design Technology
- A.A.S. in Construction Engineering Technology
- A.S. in Drafting and Design Technology
- A.A.S. in Electronics Engineering Technology
- Certificate in Geographic Information Systems (GIS) Technology
- A.A.S. in Industrial Technology
- A.S. in Technology Education
- A.A.S. in Technology Education