ARTICULATION AGREEMENT

Wytheville Community College
AA&S Specialization in Engineering

Bluefield State College
School of Engineering Technology and Computer Science

Entered into this 16th (date) day of February (month), 2018

Dr. Marsha Krotseng
President
Bluefield State College

Dr. Dean Sprinkle
President
Wytheville Community College

Dr. Angela Lambert, Interim Provost
Vice President of Academic Affairs
Bluefield State College

Dr. Lorri Huffard
Vice President of Instruction
Wytheville Community College

Dr. Shannon Bowling, Dean
School of Engineering Technology
and Computer Science
Bluefield State College

Jacob Surratt
Dean- Transfer, Business, and Social Science
Wytheville Community College

Dr. Mike Smith, Interim Dean
School of Arts and Sciences
Bluefield State College

Stanley Jones
Lead Faculty- Chemistry
Wytheville Community College

This agreement is effective with new Bluefield State College admits Fall 2018.
This agreement will be reviewed biennially.

ARTICULATION AGREEMENT

Wytheville Community College and Bluefield State College, School Engineering Technology and Computer Science.

Wytheville Community College (hereafter referred to as WCC), a community college located in Wytheville, VA and Bluefield State College (hereafter referred to as BSC), a 4-year state college in Bluefield, West Virginia agree to offer an articulated program allowing students who have completed the AA&S degree in Science with a Specialization in Engineering at WCC to transfer credits into Engineering Technology programs at Bluefield State College. They further agree that students from WCC will be accepted into the B.S. programs that are offered by the School of Engineering Technology and Computer Science program given that the students meet the required acceptance criteria. The following general principles guide the operation of this Agreement:

1. The program is designed for students who have completed the AA&S degree at WCC. A maximum of 72 credit hours from WCC will be allowed toward fulfillment of the minimum 120 credit hours required for baccalaureate completion at BSC.

2. Students must maintain a 2.0 cumulative overall grade point average in order to transfer courses.

3. Students must complete and submit an enrollment form from BSC to receive transfer credit.

4. WCC students will be given every consideration for financial assistance and will be eligible to compete for academic scholarships once they are enrolled as a full-time student at BSC.

5. This agreement becomes effective on the date set forth on the first page of this document. WCC and BSC agree to publicize this program. They further agree to monitor the performance of this agreement and to revise it as necessary. The agreement may be terminated by either party for due cause and after adequate notice to the other. Termination of the agreement will not affect any students currently enrolled at WCC at the time of termination, and they shall be able to transfer credits pursuant to this agreement.

6. Courses that count towards the English, social science, humanities and history elective requirements at WCC will also count towards the fine arts, social science and history elective requirements at BSC.

7. Students that complete their AA&S degree from WCC and transfer to BSC under the terms of this agreement will be eligible for the tuition metro rate at BSC regardless of where their residence is, so long as they transfer to BSC within two years of completing their degree from WCC. The fee structure for BSC can be found at, https://www.bluefieldstate.edu/tuition/tuition-and-fees .

PURPOSE OF AGREEMENT

This agreement is entered into to serve the instructional needs of WCC students and graduates. The general purpose of this agreement is to make clear the terms of this articulation agreement.

There are three specific goals under this agreement. First, it is the intent that this articulation agreement will facilitate a smooth transition from WCC to Engineering Technology programs at BSC as efficiently as possible. WCC graduates will understand how BSC transfers the credits they earn at WCC, as well as the changes in requirements that may permit more flexible scheduling once the student has been admitted to and enrolled at BSC. This agreement provides a systematic plan for students to continue their higher education beyond the AA&S degree from WCC.

Second, this agreement is a publication of a clear set of understandings and expectations for both institutions and programs. Making our expectations clear to students and between institutions not only contributes to the first goal, but also allows institutions to work collaboratively to meet the needs of WCC graduates. Like any policy agreement, this articulation agreement will need to be updated, revised and refined as instructional programs are revised.

Third, WCC encourages graduates to continue their educational pathway for both personal and professional development, as well as career advancement in a technical profession. This articulation agreement facilitates students' successful achievement of credentials in the field.

The following sections describe the specifics of the agreement.

Students graduating from WCC will have the option of completing their BS degree(s) in Civil Engineering Technology, Electrical Engineering Technology, Mechanical Engineering Technology, Computer Science, or Engineering Management.

While it may be possible for a student to complete one of the Engineering Technology degrees at BSC in two years, the recommended plan is for a student to complete a double major in a technology field and engineering management in three years (e.g. BS in Electrical Engineering Technology and BS in Engineering Management, BS in Mechanical Engineering Technology and BS in Engineering Management, BS in Civil Engineering Technology and BS in Engineering Management). With minimal effort, the student can also receive a minor in Applied Mathematics and Statistics from BSC.

A recommended sequence of courses is presented for each of the programs of study.

37761

AA&S with Specialization in Engineering and BS in Electrical Engineering Technology

First Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	ENGL 101	Composition 1	ENG 111	3
WCC	GNET 102	Tech Physics 2	PHY 242 ✓	4
WCC	GNET 115	Tech Math 1	MTH 263 Prereq ?	4
WCC	Core Skills	FA/H/SS Core Skill	HUMN Elective	3

Already in University Physics II

Second Semester

Semester	Course #	Course Title	Substitute	Hours
Summer 1	ELET 110	Circuit Analysis 1		4
Summer 1	ELET 112	Electrical Measurements		1
WCC	ENGL 102	Composition 2	ENG 112	3
WCC	GNET 101	Tech Physics 1	PHY 241 ✓	4
WCC	GNET 116	Tech Math 2	MTH 263 Prereq ?	4

Already in Univ. Physics I

Third Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 1	ELET 201	Solid State Electronics		4
Fall 1	ELET 205	AC/DC Machinery		4
Fall 1	ELET 209	Power Systems		3
WCC	MATH 220	Calculus 1	MTH 263 ✓	4
WCC	COSC 210	Visual Basic	Programming	3

Calculus I

Fourth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	ELET 202	Semiconductor Devices		4
Spring 1	ELET 216	Electrical Control Systems		4
Spring 1	ELET 218	Fund. of Computers		4
WCC	MEET 112	Computer Aided Drafting	STEM CAD Elective	3

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	ELET 305	Microprocessors		4
Fall 2	ELET 307	Circuits Analysis 2		3
WCC	MATH 230	Calculus 2	MTH 264 ✓	4
WCC	Core Skills	Literature	WCC Lit. Course HUMN Elective ✓	3
WCC	COMM 208	Fund. of Speech	CST 110 ✓	3

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 2	ELET 304	Integrated Circuit Tech		4
Spring 2	ELET 316	Programmable Controllers		3
Spring 2	MEET 206	Instrumentation		3
Fall 2	ENGR 315	Engineering Economics		3
? Fall 2	EGMT 317	Fund. of Speech	CST 110	3

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
✓ WCC	CHEM 101	General Chemistry	CHM 111	3
✓ WCC	CHEM 103	Chemistry Lab	CHM 111	1
WCC	ENGR 201	Statics ? EGR	ENG 140 Title ?	3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3
* WCC	Elective	Technical Elective ? EGR	ENG 245 Title ?	3

Already in

Should this be EGR instead of ENG?

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 3	EGMT 410	Operations Research		3
Spring 2	ELET 408	Communications Electronics		4
Spring 2	ELET 492	Senior Project		2
WCC	Core Skills	FA/H/SS Core Skills	SS Elective	3
WCC	Core Skill	Health and Wellness	Phys Ed	2

Courses required for double major in BS Electrical Engineering Technology and BS Engineering Management

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	ENGR 315	Engineering Economics		3
Fall 3	EGMT 323	Technology Entrepreneurship		3
WCC	MATH 230	Calculus 2	MTH 264	4
Summer I	ENGR 311	Engineering Statistics		3
Fall 1	ACCT 201 or MGMT 320	Principles of Accounting or Organizational Behavior	CST 110	3

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	EGMT 317	Project Management		4
Spring 3	EGMT 362	Discrete Event Simulation		3
WCC	COMM 208	Fund. of Speech	CST 110	4
Spring 3	MGMT 210	Principles of Management		3
WCC	Core Skills	FA/H/SS Core Skills		3

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 3	EGMT 443	Statistical Process Control		3
Fall 3	EGMT 465	Supply Chain Management		3
Fall 3	EGMT 401	Business Planning for Engineers		3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3
WCC	Science/Math Elective	CHEM 101, or MATH 240, 310, 311 or ENGR 325	CHM 111	3

→ Speech ?

CST 110 currently comes in as COMM 208

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 3	EGMT 410	Operations Research		3
Spring 2	EGMT 413	Undergraduate Research	ELET 492 ours	4
Spring 3	EGMT 472	Facilities Planning		2
Spring 3	MGMT 482	Collective Bargaining		3
WCC	Core Skill	Health and Wellness	Phys Ed	2
Fall 1	Core Skills	Literature	WCC Lit. Course	3

AA&S with Specialization in Engineering and BS in Mechanical Engineering Technology

First Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 1	MEET 101	Industrial Materials		3
Fall 1	MEET 111	Engineering Drafting		3
WCC	ENGL 101	Composition	ENG 111	3
WCC	GNET 101	Tech Physics 1	PHY 241	4
WCC	GNET 115	Tech Math 1	MTH 263 Prereq	4

Second Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	MEET 112	Computer Aided Drafting	STEM CAD Elective	3
WCC	ENGL 102	Composition 2	ENG 112	3
WCC	GNET 102	Tech Physics 2	PHY 242	4
WCC	GNET 116	Tech Math 2	MTH 263 Prereq	4

Third Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	ENGR 201	Statics	EGR 140 ✓	3
Fall 1	MEET 201	Manufacturing Processes		3
WCC	MATH 220	Calculus 1	MTH 263	4
WCC	COSC 210	Visual Basic	Programming	3
WCC	Core Skills	FA/H/SS Core Skills	HUMN Elective	3

Engineering Mechanics - Statics

Fourth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	ENGR 202	Strength of Materials		3
Spring 2	MEET 202	Computer Aided Manufacturing		3
Spring 1	MEET 206	Instrumentation		3
Spring 1	MEET 214	Hydraulics and Fluid Power		3
Summer 1	ELET 110	Circuit Analysis		4
Summer 1	ELET 112	Electrical Measurements		1

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 1	MEET 305	Applied Thermodynamics		3
Fall 1	MEET 311	Machine Elements 1		3
WCC	MATH 230	Calculus 2	MTH 264	4
WCC	COMM 208	Fund. of Speech	CST 110	3
Fall 2	ELET 205	AC/DC Machinery		4

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	ENGR 302	Dynamics	EGR 245 ✓	~~4~~ 3
Spring 1	MEET 306	Heat Transfer		3
Spring 1	MEET 302	Machine Elements		4
Spring 1	ELET 216	Electrical Control Systems		3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3

not 4

Engineering Mechanics - Dynamics

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 1	MEBT 403	Kinematics		4
Fall 2	MEBT 421	Senior Design 1		1
WCC	CHEM 101	General Chemistry	CHM 111	3
WCC	CHEM 103	Chemistry Lab	CHM 111	1
Fall 2	ENGR 315	Engineering Economics		3
WCC	Core Skills	FA/H/SS Core Skills	SS Elective	3

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 2	MEBT 422	Senior Design 2		1
Spring 2	EGMT 410	Operations Research		3
Spring 2	EGMT 472	Facilities Planning		3
WCC	Core Skills	Literature	WCC Lit. Course HUMN Elective	3
WCC	Core Skill	Health and Wellness	Phys Ed	2

Courses required for double major in BS Mechanical Engineering Technology and BS Engineering Management

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	ENGR 315	Engineering Economics		3
Fall 3	EGMT 323	Technology Entrepreneurship		3
WCC	MATH 230	Calculus 2	MTH 264	4
Summer 1	ENGR 311	Engineering Statistics		3
Spring 3	ACCT 201 or MGMT 330	Principles of Accounting or Organizational Behavior		3

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	EGMT 317	Project Management		4
Spring 3	EGMT 362	Discrete Event Simulation		3
WCC	COMM 208	Fund. of Speech	CST 110	4
Spring 3	MGMT 210	Principles of Management		3
WCC	Core Skills	FA/H/SS Core Skills		3

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 3	EGMT 443	Statistical Process Control		3
Fall 3	EGMT 465	Supply Chain Management		1
Fall 3	EGMT 401	Business Planning for Engineers	ENG 140	3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3
WCC	Science/Math Elective	CHEM 101, or MATH 240, 310, 311 or ENGR 325	CHM 111	3

EGR 140 currently comes in as ENGR 201

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 3	EGMT 410	Operations Research		3
Fall 2/Spring 2	EGMT 413	Undergraduate Research	MEET 421/422	2
Spring 3	EGMT 472	Facilities Planning		2
Spring 3	MGMT 482	Collective Bargaining		3
WCC	Core Skill	Health and Wellness	Phys Ed	2
WCC	Core Skills	Literature	WCC Lit. Course HUMN Elective	3

AA&S with Specialization in Engineering and BS in Civil Engineering Technology

First Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 1	CIET 101	Construction Materials		4
WCC	ENGL 101	Composition	ENG 111	3
WCC	GNET 101	Tech Physics 1	PHY 241	4
WCC	GNET 115	Tech Math 1	MTH 263 Prereq	4

Second Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	CIET 110	Plane Surveying & Mapping		4
WCC	ENGL 102	Composition 2	ENG 112	3
WCC	GNET 116	Tech Math 2	MTH 263 Prereq	4
WCC	MEET 112	Computer Aided Drafting	STEM CAD Elective	3
WCC	Core Skills	FA/H/SS Core Skills	HUMN Elective	3

Third Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	ENGR 201	Statics	EGR 140	3
Fall 1	CIET 207	Geotechnics		3
Fall 1	CIET 211	Control Survey		4
WCC	MATH 220	Calculus 1	MTH 263	3

Fourth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	ENGR 202	Strength of Materials		3
Spring 1	CIET 212	Hydraulics		3
Spring 1	CIET 220	Construction Estimating		3
WCC	GNET 102	Technical Physics 2	PHY 242	4

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	CHEM 101	General Chemistry	CHM 111	3
WCC	CHEM 103	Chemistry Lab	CHM 111	1
Fall 2	CIET 301	Environmental Systems		3
WCC	MATH 230	Calculus 2	MTH 264	4
Fall 2	CIET 305	Hydro Systems		3
WCC	COMM 208	Fund. of Speech	CST 110	3

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 2	CIET 302	Geotechnical Analysis and Design		3
Fall 2	EGMT 317	Project Management		3
Spring 2	CIET 306	Civil Site Design		3
WCC	MATH	240/301/310/311 or ENGR 311	MTH 267	3
WCC	ENGR 302	Dynamics		3

MTH 310

see pg 16

MTH 267 currently comes in as MATH 310

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	CIET 403	Reinforced Concrete Design		3
Fall 2	CIET 401	Structural Analysis		3
Fall 1	ENGR 315	Engineering Economics		3
WCC	Core Skills	Literature	WCC Lit. Course HUMN Elective	3
WCC	Core Skills	Health and Wellness	Phys Ed	2

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 2	CIET 402	Structural Steel Design		3
Spring 2	CIET 415	Transportation Projects		3
Spring 2	CIET 433	GIS Application		3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3
WCC	Core Skill	Health and Wellness	SS Elective	3

Courses required for double major in BS Civil Engineering Technology and BS Engineering Management

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 1	ENGR 315	Engineering Economics		3
Fall 3	EGMT 323	Technology Entrepreneurship		3
WCC	MATH 230	Calculus 2	MTH 264	4
Summer 1	ENGR 311	Engineering Statistics		3
Fall 3	ACCT 201 or MGMT 330	Principles of Accounting or Organizational Behavior		3

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	EGMT 317	Project Management		4
Spring 3	EGMT 362	Discrete Event Simulation		3
WCC	COMM 208	Fund. of Speech	CST 110	4
Spring 3	MGMT 210	Principles of Management		3
WCC	Core Skills	FA/H/SS Core Skills	SS Elective	3

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 3	EGMT 443	Statistical Process Control	CHM 111	3
Fall 3	EGMT 465	Supply Chain Management	CHM 111	3
Fall 3	EGMT 401	Business Planning for Engineers	ENG 140	3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3
WCC	Science/Math Elective	CHEM 101, or MATH 240, 310, 311 or ENGR 325	CHM 111	3

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 3	EGMT 410	Operations Research		3
Spring 2	EGMT 413	Undergraduate Research	CIET 415	3
Spring 2	CIET 306	Civil Site Design		3
Spring 3	MGMT 482	Collective Bargaining		3
WCC	Core Skill	Health and Wellness	Phys Ed	2
WCC	Core Skills	Literature	WCC Lit. Course	3

AA&S with Specialization in Engineering and BS in Computer Science

First Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	COSC 131, 131L	Computer Programming 1	Comp Program.	4
WCC	ENGL 101	Composition	ENG 111	3
WCC	GNET 101	Tech Physics 1	PHY 241	4
WCC	GNET 115	Tech Math 1	MTH 263 Prereq	4

Second Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	COSC 132, 132L	Computer Programming 1		4
WCC	ENGL 102	Composition 2	ENG 112	3
WCC	GNET 116	Tech Math 2	MTH 263 Prereq	4
WCC	GNET 102	Technical Physics 2	PHY 242	4

Third Semester

Semester	Course #	Course Title	Substitute	Hours
WCC	MATH 220	Calculus 1	MTH 263	3
Fall 1	COSC 224	Web Programming		3
Fall 1	COSC 241	Intro to Linux/Unit		3
Fall 1	COSC 261	Data Structures		3
WCC	Core Skills	FA/H/SS Core Skills	HUMN Elective	3

Fourth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	ELET 218	Fund. of Digital Computers		4
WCC	MATH 230	Calculus 2	MTH 264	4
WCC	COMM 208	Fund. of Speech	CST 110	3
Spring 1	COSC 250	Database Mgmt. Systems		3

Fifth Semester

Semester	Course #	Course Title	Substitute	Hours
Fall 2	ELET 305, 305L	Microprocessors		4
Fall 1	MATH 250	Discrete Mathematics		3
Fall 2	COSC 240	Comp. Org. and Arch.		3
Fall 2	COSC 321	Software Analysis and Design		3
WCC	Core Skills	FA/H/SS Core Skills	History Elective	3

Sixth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 2	COSC 422	Software Engineering		3
Spring 2	COSC 422	Programming Languages		3
Fall 2	COSC ELEC	COSC 290 – Topics in CS		3
WCC	MATH 301	Probability and Statistics	MTH 240	3
WCC	Core Skills	Health and Wellness	Phys Ed	2

NO MATH 240 they do have

MTH 240 currently comes in as MATH 210 see next page

Seventh Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 1	ENGR 315	Engineering Economics		3
Fall 2	COSC 327	Analysis of Algorithms		3
Fall 1	COSC 421	Operating Systems		3
WCC	COSC/Tech	CS Technical Elective		3
WCC	Core Skills	Literature	WCC Lit. Course HUMN Elective	3

Eighth Semester

Semester	Course #	Course Title	Substitute	Hours
Spring 2	COSC	Technical Elective		3
Spring 2	COSC	Technical Elective		3
Spring 2	COSC 499	Projects in CS		4
Spring 2	COSC 347	Theory of Computation		3
WCC	Core Skills	FA/H/SS Core Skills	SS Elective	3

Courses required for Minor in Applied Mathematics and Statistics

Course #	Course Title	Hours	Substitute	Hours
MATH 240	Calculus 3	4	MTH 265 - Calculus 3	3 ?
MATH 310	Differential Equations	3 ✓	MTH 267 - Differential Equations	3
MATH 311	Linear Algebra	3 ✓	MTH 266 - Linear Algebra	3
MATH 210, MATH 301, ENGR 311	Statistics Course	3	MTH 240 - Statistics	3
ENGR 325	Numerical Analysis	3		3
	Total	16	Total	15

MTH 240 currently comes in as MATH 210

Students transferring from WCC may complete 15 hours of the 16 hour requirement to receive the Minor in Applied Mathematics and Statistics.

Overview and Summary

For students following this agreement, the steps are as follows:

Step 1: Complete AA&S degree in Science with a Specialization in Engineering at WCC
Step 2: Apply for admission at BSC in an Engineering Technology program and provide BSC with copy of official transcripts.
Step 3: Students will be assigned an advisor at BSC and create a plan of study before registration of first semester courses.

Students should link to www.bluefieldstate.edu to begin the admissions process.

While every effort has been made to ensure the correctness and completeness of this document, this articulation agreement does not supersede the requirements of the BSC catalog in fulfilling degree requirements, unless specifically stated.