

INDUSTRIAL TECHNOLOGY

Volume 23, Number 2 - April 2007 through June 2007

Translating CCAF AAS Degree Programs

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Peer-Refereed Article



Administration Curriculum Higher Education NAIT





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Abstract

A relation of equivalence for Community College of the Air Force Associate in Applied Science degree programs and industrial technology-oriented civilian Associate in Applied Science degree programs was investigated. The purpose was to facilitate acceptance of Community College of the Air Force Associate in Applied Science degree programs for transfer to baccalaureate degree-granting institutions that prepare industrial technologists. Relation of equivalence was pursued through the use of specialized computer files maintained by the National Crosswalk Service Center that articulate the relationship between Air Force Specialty codes developed by the U.S. Air Force, occupational codes developed by the Bureau of Labor Statistics, and codes developed by the National Center for Education Statistics that represent postsecondary instructional programs. The findings indicate a relation of equivalence exists between selected Community College of the Air Force Associate in Applied Science degree programs and selected civilian industrial technology-oriented Associate in Applied Science degree programs. Specialized computer files maintained by the National Crosswalk Service Center can be used to facilitate acceptance of Community College of the Air Force Associate in Applied Science degree programs for transfer to baccalaureate degree-granting institutions that prepare industrial technologists.

Introduction

The traditional role of the Associate in Applied Science (AAS) degree has been to improve the employment opportunities of degree holders for entry into specific careers or occupations. This is in contrast to the traditional role of the Associate in Arts (AA) degree, whose primarily purpose is to prepare graduates for the rigors of upper division baccalaureate work. Although the AAS's objective is to facilitate direct employment, numerous baccalaureate degree-granting institutions, including many that administer industrial technology programs, offer upper division programs that accept AAS degrees in partial fulfillment of the baccalaureate degree (e.g., East Carolina University, 2006; Kent State University, 2006; Morehead State University, 2006; Northern Illinois University, 2006; Southeast Missouri State University, 2006).

Community College of the Air Force (CCAF) graduates are a viable source for 2+2 industrial technology programs or industrial technology degree completion programs that lead to a bachelor's degree. They not only possess the academic preparation in their specialty, but they will have fulfilled humanities, social and behavioral sciences, written and oral communication, and mathematics requirements, all of which are an important part of the academic preparation of industrial technologist (NAIT, 2006a). More importantly, because of graduation requirements, all CCAF graduates will possess several years of work experience. CCAF graduates can be a viable asset to industrial technology student bodies, classes, and labs because of what they possess.

While NAIT defines industrial technology (NAIT, 2006a) and it operationally defines industrial technology by the programs it accredits (NAIT, 2006b), CCAF degree program titles still use Air Force terminology and reflect Air Force occupations, which may be difficult for college and university admissions personnel and the civilian community in general to translate. The problem of this study was to identify industrial technology-oriented Community College of the Air Force Associate in Applied Science (CCAF AAS) degree programs. The purpose was to facilitate acceptance of CCAF AAS degree programs for transfer to fouryear industrial technology programs, whether they are 2+2 industrial technology programs or industrial technology degree completion programs that lead to a bachelor's degree.

The Community College of the Air Force

The Community College of the Air Force (CCAF), located at Maxwell AFB, Alabama, is the largest community college in the world. Nearly 7,500 instructors in 100 schools affiliated with the college teach degree-applicable courses. Its affiliated schools are located in 36 states, the District of Columbia, six foreign locations, and one territory, and are accredited by the Southern Association of Colleges and Schools (SACS) through January 1, 2009.

The programs administered by the CCAF are designed to help enlisted Airmen meet future technological and leadership challenges of the United States Air Force by combining Air Force technical training with general education course work from accredited civilian colleges. Each year about 1.6 million semester hours are earned in CCAF classrooms. Since issuing its first degree in 1977, the college has awarded more than 258,000 AAS degrees. More than 380,000 enlisted personnel including regular Air Force members, Air National Guard personnel, and Air Force Reservists are registered with almost 113,000 Airmen actively pursuing a CCAF degree.

The College offers 67 degree programs that encompass 129 Air Force Specialty Codes (AFSC) or what the National Association of Industrial Technology (NAIT) refers to as programs options (National Association of Industrial Technology [NAIT], 2006a). All CCAF degree programs require a minimum of 64 semester hours (SH) from the following areas: Physical Education, 4 SH; Technical Education, 24 SH; General Education, 15 SH; Leadership, Management, and Military Studies, 6 SH; and Program Elective, 15 SH.

AFSCs are alphanumeric identifiers of occupational specialties and skill levels and are used by the Air Force to identify Air Force Specialties (AFS). Enlisted member AFSCs consist of five characters. The first (number) denotes the career group (1, Operations; 2, Maintenance/Logistics; 3, Support; 4, Medical/Dental; 5, Legal/Chaplain; 6, Acquisition or Finance; 7, Special Investigations; 8, Special Duty Assignments; 9, Special Reporting Identifiers). The second character (letter) denotes the career field. The third character (number) denotes the career field subdivision. The fourth character (number) specifies the skill level (1, 3, 5, 7, and 9), and the fifth character (number) denotes further job division within the same career field subdivision.

<u>Career Progression of CCAF Students/Enlisted Airmen</u>

Enlisted members of the Air Force begin their career with Basic Military Training (BMT) with the rank of Airman Basic. Following BMT, they begin AFS training at one of five Air Force installations.

Airmen are awarded a "1" (helper) level when they enter technical school for their AFSC. Upon graduation from technical school, they are awarded a "3" (apprentice) level. Depending on the length of the technical school, Airmen can be promoted to the rank of Airman and later Airman First Class upon meeting time-in-grade requirements. With the 3 level and once time-in-service and time-in-grade requirements are met, Airmen can be promoted to the rank of Senior Airman.

Airmen are normally awarded a "5" (journeyman) level after a period of onthe-job training (OJT) and completion of correspondence courses, called Career Development Courses (CDC). Depending on the job, this process can last up to 18 months. With the 5 level and once time-in-service and time-in-grade requirements are met, Airmen can be promoted to the rank of Staff Sergeant. To fulfill the requirements for a CCAF AAS degree, Airmen are required to have earned their 5 (journeyman) level in the appropriate AFSC.

Upon promotion to Staff Sergeant, Airmen enter training for their "7" (craftsman) level. Seven level training consists of CDCs, OJT, and for some AFSCs, a 7-level technical school. Possession of the 7 level and fulfillment of time-in-service and time-in-grade requirements are mandatory for promotion to the rank of Technical Sergeant and later, Master Sergeant and Senior Master Sergeant.

Upon promotion to Senior Master Sergeant and following completion of all training requirements, Airmen receive a "9" (superintendent) level. With a 9 level, completion of all training requirements, and fulfillment of time-in-service and time-in-grade requirements, Airmen can be promoted to the rank of Chief Master Sergeant (Air Force Departmental Publishing Office, 2006; Air Force Departmental Publishing Office, 2005).

Description of the Study

Key to the pursuit of this study's problem is the means for translating CCAF AAS degree programs to a form useful by civilian communities. That is, how can the somewhat vaguely familiar language used to describe CCAF AAS degree programs be made more familiar to the civilian community, in as objective a manner as possible, to facilitate acceptance of CCAF AAS degree programs for transfer to baccalaureate degree-granting institutions? One means lies in the resources available through the National Crosswalk Service Center (NCSC)-their Crosswalks in particular.

The NCSC manages technical resource that deal with occupational and training program classification systems (National Crosswalk Service Center [NCSC], 2006c). Its mission is to maximize the effective and efficient use of occupational information by providing specialized occupational tools (files, reports, and software) and technical assistance to users and producers of occupational information. To make their point, they encourage readers to remember what mothers use to say: "Always use a crosswalk when crossing the street." Moreover, the Center illustrates their point by noting that as those crosswalks helped users get from one side of the street to the other, the crosswalks and other tools available from NCSC help users get from one place to another (NCSC, 2006c).

Among the crosswalks maintained by NCSC, are the Military Occupation Code (MOC)-to-Standard Occupational Classification (SOC) and the SOC-to-Classification of Instructional Programs (CIP) Crosswalks. The result of a joint effort between the Department of Education and the Department of Labor, the purpose of the SOC-to-CIP Crosswalk is to show the relationships between program content and occupations, based on the descriptions of each (NCSC, 2006b).

The SOC system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupation(s) requiring similar job duties, skills, education, or experience (Bureau of Labor Statistics, 2000).

CIP is a taxonomic coding scheme that contains titles and descriptions of primarily postsecondary instructional programs. It was developed to facilitate National Center for Education Statistics (NCES) collection and reporting of postsecondary degree completions by major field of study using standard classifications that capture the majority of reportable program activity. CIP is the accepted federal government statistical standard on instructional program classifications (National Center for Education Statistics, 2002).

The MOC-to-SOC Crosswalk crossreferences military occupational codes of the Air Force, Army, Coast Guard, Marine Corps, and Navy with equivalent Federal Standard Occupational Classification codes. The Crosswalk data are intended to support both military and civilian research and analytical functions that require military to civilian occupational conversion information. The content of the MOC-to-SOC Crosswalk file were developed by and can also be accessed through the Defense Manpower Data Center (DMDC) at https://www.dmdc.osd.mil/owa/odb (NCSC, 2004). AFSCs are used by the DMDC to cross-reference AFS with the equivalent Federal Standard Occupational Classification codes.

Methodology Code Collection

Codes, including AFSCs and program titles, for each CCAF degree program were downloaded from the 2005-2007 CCAF catalogue (Community College of the Air Force, 2005). The MOC-to-SOC and the SOC-to-CIP Crosswalks were downloaded from NCSC (NCSC. 2006a). Finally, and for the purpose of this study, the listing of all programs administered by the North Carolina Community College System (NCCCS) was downloaded (North Carolina Community College System [NCCCS], 2006). NCCCS administers associate degree, certificate, and diploma programs organized around ten program groups-Agriculture-Natural-Resources-Technologies, Arts and Sciences, Biological and Chemical Technologies, Business Technologies, Commercial and Artistic Production Technologies, Construction Technologies, Engineering Technologies, Health Sciences, Industrial Technologies, Public Service Technologies, and Transport Systems Technologies.

Figure 1 illustrates the procedure used to translate CCAF degree programs. It shows how tools available from NCSC and the 2005-2007 CCAF catalogue were used to derive the relationship between CCAF AAS degree programs and comparable civilian AAS industrial technology-oriented degree programs.

Procedure

All NCCCS Industrial Technologies AAS degree program titles and CIP codes were identified and the corresponding SOCs were identified using the SOC-to-CIP Crosswalk. The SOCs were then used to identify corresponding AFSCs using the MOC-to-SOC Crosswalk. Finally, with the aid of the 2005-2007 CCAF catalogue, the respective AFSCs were used to identify corresponding CCAF programs.

In addition, the CIP codes for all NCCCS AAS degree programs from the Construction Technologies, Engineering Technologies, and Transport Systems Technologies program groups were used to identify respective AFSCs and CCAF programs. The base for this study was broadened to include programs from these three program groups because across the nation programs similar to these AAS degree programs are accredited by NAIT (NAIT, 2006b). Furthermore, many become part of NAIT-accredited 2+2 industrial technology program or industrial technology degree completion program graduation requirements that lead to a bachelor's degree (e.g., East Carolina University, 2006; Kent State University, 2006; Morehead State University, 2006; Northern Illinois University, 2006; Southeast Missouri State University, 2006). That is, in order for students to pursue a NAIT-accredited 2+2 industrial technology program or industrial technology degree completion program, they must possess a qualifying technical AAS degree.

Findings

NCCCS administers ten Construction Technologies AAS degree programs, seventeen Engineering Technologies AAS degree programs, twenty-seven Industrial Technologies AAS degree programs, and eleven Transport Systems Technologies AAS degree programs. Of the 67 AAS degree programs/129 program options administered by CCAF, 22 AAS degree programs/42 program options align themselves with one or more of the 65 industrial technology-oriented AAS degree programs administered by the NCCCS based on the CIP-to-SOC-to-MOC comparison. The 22 AAS degree programs/42 program options that align themselves with one or more of the industrial technology-oriented AAS degree programs administered by the NCCCS appear in Table 1 along with the corresponding NCCCS program group(s) with which they are aligned.

The seven different CCAF degree programs and their respective program options that align themselves with the Construction Technologies program group appear in Table 2 aligned with their respective NCCCS programs. The ten different CCAF degree programs and their respective program options that align themselves with the Engineering Technologies program group appear in Table 3 aligned with their respective NCCCS programs. The thirty-two CCAF degree programs and their respective program options that align themselves with the Industrial Technologies program group appear in Table 4 aligned with their respective NCCCS programs. The seventeen different CCAF degree programs and their respective program options that align themselves with the Transport Systems Technologies program group appear in Table 5 aligned with their respective NCCCS programs.

Discussion

The problem of this study was to identify industrial technology-oriented CCAF AAS degree programs. The purpose was to facilitate acceptance of CCAF AAS degree programs for transfer to four-year industrial technology programs, whether they are 2+2 industrial technology programs or industrial technology degree completion programs that lead to a bachelor's degree.

Virtually all industrial technology professionals can probably, based on CCAF AAS degree program title, program content, AFSC/program option, and the like, determine whether a CCAF AAS degree program is a suitable fit for transfer to a 2+2 indus-

	AEGO	NCCCS Pro-
CCAF AAS Degree Program Title	AFSC	gram Group(s) ¹
Aerospace Ground Equipment Technology	2A6X2	I
Aerospace Historian	3H0X1	C
Aircraft Armament Systems Technology	2W1X1	I
Aviation Maintenance Technology	2A3X3	I, T
Aviation Maintenance Technology	2A5X1	I, T
Aviation Maintenance Technology	2A5X2	·
Aviation Maintenance Technology	2A6X1	
Aviation Maintenance Technology	2A6X3	I, T
Aviation Maintenance Technology	2A6X4	I, T
Aviation Maintenance Technology	2A6X5	I, T
Aviation Maintenance Technology	2A6X6	I, T
Aviation Maintenance Technology	2A7X3	I, T
Avionic Systems Technology	2A0XX	I, T
Avionic Systems Technology	2A3X1	I, T
Avionic Systems Technology	2A3X2	I, T
Avionic Systems Technology	2A5X3	I, T
Bioenvironmental Engineering Technology	4B0X1	Ι
Biomedical Equipment Technology	4A2X1	Ι
Computer Science Technology	3C0X2	Е
Construction Technology	3E2X1	C, I
Construction Technology	3E3X1	C, I
Construction Technology	3E5X1	Е
Electronic Systems Technology	2EXXX	C, I, E
Electronic Systems Technology	2M0X1	C, I, E
Electronic Systems Technology	2P0X1	C, I, E
Emergency Management	3E9X1	C,I
Information Management	3A0X1	E
Information Systems Technology	2S0X2	Е
Information Systems Technology	3C0X1	Е
Logistics	2G0X1	Ι
Maintenance Production Management	2T3X7	Ι
Mechanical & Electrical Technology	3E0X1	C,I
Mechanical & Electrical Technology	3E1X1	C
Mechanical & Electrical Technology	3E4X2	I
Metals Technology	2A7X1	I,T
Missile & Space Systems Maintenance	2M0X2	E,T
Munitions Systems Technology	2W2X1	I
Nondestructive Testing Technology	2A7X2	I
Public Health Technology	4E0X1	I
Safety	1S0X1	I
Vehicle Maintenance	2T3X1	T
Vehicle Maintenance	2T3X1 2T3X2	Т

 Table 1. CCAF AAS Degree Program Titles and AFSCs that Correspond to One or More NCCCS AAS Degree Program Groups

¹Key: C, Construction Technologies; E, Engineering Technologies; I, Industrial Technologies; T, Transportation Systems Technologies trial technology program or industrial technology degree completion program that leads to a bachelor's degree. When there is doubt however, the Crosswalks provided by the NCSC can provide an objective "deciding vote" on whether a selected CCAF AAS degree program is suitable for acceptance.

This study was limited to the translation of CCAF AAS degree programs aided by the use of CIP codes for industrial technology-oriented AAS degree programs administer by the NCCCS. Furthermore, the study was limited to four NCCCS program groups: Construction Technologies, Engineering Technologies, Industrial Technologies, and Transport Systems Technologies. The literature (NAIT, 2006b), however, also suggests that some NCCCS AAS degree programs that are a part of the Biological and Chemical Technologies, Business Technologies, and Public Service Technologies program groups are forms of industrial technology (see Table 6). These programs, along with a myriad of other industrial technologyoriented AAS degree programs, can be subjected to study using the aforementioned procedures, and the findings used to broaden the base of CCAF AAS degree programs that are suitable for transfer to 2+2 industrial technology programs or industrial technology degree completion programs that lead to a bachelor's degree.

As well, the results of this study have implications for industrial technologyoriented AAS degree programs and Airmen who have not fulfilled the requirements for their AAS prior to leaving the Air Force. That is, the results can be used by community colleges and Airmen who wish to apply CCAF course work towards specific civilian AAS degree programs.

Finally, it is recommended that NAIT begin compiling CIP codes for their accredited programs. The data can be used to more effectively define industrial technology and to aid in facilitating the transfer or otherwise acceptance of non-traditional course work.

Table 2. CCAF AAS Degree Programs and AFSCs that Correspond to NCCCS Con-
struction Technologies AAS Degree Programs

NCCCS Program and Corresponding CCAF AAS Degree gram Title and AFSC	Pro- CIP
Air Conditioning, Heating & Refrigeration Technology	47.0201
Mechanical & Electrical Technology 3E1X1	
Historic Preservation Technology	30.1201
Aerospace Historian 3H0X1	
Building Construction Technology	46.0499
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	
Commercial Refrigeration Technology	47.0201
Mechanical & Electrical Technology 3E1X1	
Construction Management Technology	46.0401
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	
Electric Lineman Technology	46.0303
Electronic Systems Technology2EXXX	
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	
Electrical/Electronics Technology	46.0302
Mechanical & Electrical Technology 3E0X1	
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	
Industrial Construction Technology	46.9999
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	
Industrial Construction Technology/Electrical	46.9999
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	
Industrial Construction Technology/Mechanical	46.9999
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Emergency Management 3E9X1	

References

- Air Force Departmental Publishing Office. (2006). Air force instruction 36-2101 classifying military personnel (officer and enlisted). Retrieved May 31, 2006, from http://www. e-publishing.af.mil/pubfiles/af/36/ afi36-2101/afi36-2101.pdf
- Air Force Departmental Publishing Office. (2005). Air force pamphlet 36-2241, volume I promotion fitness examination (PFE) study guide. Retrieved September 9, 2006, from http://www.e-publishing.af.mil/ pubfiles/af/36/afpam36-2241v1/afpam36-2241v1.pdf
- Bureau of Labor Statistics. (2000). Standard occupational classification (SOC) system. Retrieved May 25, 2006, from http://www.bls.gov/soc/
- Community College of the Air Force. (2005). The degree programs by AFSC. Retrieved May 25, 2006, from http://www.au.af.mil/au/ccaf/ catalog/2005cat/deg_req_two.htm
- East Carolina University. (2006). 2+2 and transfer articulation agreements. Retrieved June 2, 2006, from http:// www.tecs.ecu.edu/tsys/transfer/Arti culation%20Agreements.htm
- Kent State University. (2006). College of technology—applied science division. Retrieved June 2, 2006, from http://cms.kent.edu/tech/ AcademicDivisions/appliedscience/ bachelordegree.cfm
- Morehead State University. (2006). Technology management completer degree program department of industrial and engineering technology. Retrieved June 2, 2006, from http://www.moreheadstate.edu/files/ units/admissions/Technology%20M anagement%20Completer%20Progr am%20Requirements.pdf

National Association of Industrial Technology. (2006a). 2006 NAIT accreditation handbook, Retrieved April 13, 2006, from http://www. nait.org/accred/2006accreditation handbookcomp.pdf

National Association of Industrial Technology. (2006b). NAIT accredited programs 2005-2006. Retrieved April 13, 2006, from http://www. nait.org/accred/accrprog.html National Center for Education Sta-

Table 3. CCAF AAS Degree Programs and AFSCs that Correspond to NCCCS Engi-
neering Technologies AAS Degree Programs

NCCCS Program and Corresponding CCAF AAS Degree Pro-	~~~
gram Title and AFSC	CIP
Architectural Technology	15.0101
Automation Engineering Technology	15.0405
Civil Engineering Technology	15.0201
Construction Technology 3E5X1	
Computer Engineering Technology	15.1201
Electrical Engineering Technology	15.0303
Electronics Engineering Technology	15.0303
Electronics Engineering Technology/Instrumentation	15.0404
Electronics Engineering Technology/Microelectronics	15.0303
Geographic Information System/Global Positioning System Tech	11.0301
Information Systems Technology 2S0X2	
Information Management 3A0X1	
Information Systems Technology 3C0X1	
Industrial Engineering Technology	47.0105
Avionic Systems Technology 2A0XX	
Electronic Systems Technology 2EXXX	
Electronic Systems Technology 2M0X1	
Missile & Space Systems Maintenance 2M0X2	
Electronic Systems Technology 2P0X1	
Landscape Architecture Technology	4.0601
Laser and Photonics Technology	15.0304
Mechanical Engineering Technology	15.0805
Materials Science Technology	15.0611
Scientific Graphics Technology	11.0803
Computer Science Technology 3C0X2	
Surveying Technology	15.1102
Telecommunications & Network Engineering Technology	15.0305

 Table 4. CCAF AAS Degree Programs and AFSCs that Correspond to NCCCS Industrial Technologies AAS Degree Programs

NCCCS Program and Corresponding CCAF AAS Degree Pro-	
gram Title and AFSC	CIP
Biomedical Equipment Technology	15.0401
Biomedical Equipment Technology 4A2X1	
Bioprocess Manufacturing Technology	15.0613
Chemical Process Technology	41.0301
Computer-Aided Drafting Technology	15.1302
Electrical Power Production Technology	46.0301
Electronic Systems Technology 2EXXX	
Construction Technology 3E2X1	
Construction Technology 3E3X1	
Electronic Servicing Technology	47.0199

tistics. (2002) Classification of instructional programs: 2000 edi-	Table 4. CCAF AAS Degree Programs and AFSCs that Correspond to trial Technologies AAS Degree Programs (continued)	NCCCS Indus-
tion, Retrieved May 25, 2006, from	Electronics Technology	15.0303
http://nces.ed.gov/pubsearch/pub- sinfo.asp?pubid=2002165	Environment, Health, & Safety Technology	15.0701
National Crosswalk Service Center.	Safety 1S0X1	
(2004). Defense manpower data	Bioenvironmental Engineering Technology 4B0X1	
center military occupation code	Public Health Technology 4E0X1	
(MOC) to standard occupational	Facility Maintenance Technology	46.0401
classification (SOC) crosswalk, Re- trieved May 25, 2006 from, http://	Construction Technology 3E2X1	-0.0-01
www.xwalkcenter.org/xw_ackx.	Construction Technology 3E3X1	
html#MOCSOC	Emergency Management 3E9X1	
National Crosswalk Service Center.		18 0702
(2006a). Crosswalks—career on-	Furniture Production Technology	48.0702
estop official crosswalk tables [data	Furniture Production Technology/Design and Product Development	48.0199
file]. Available from the Cross-	Industrial Systems Technology	15.0499
walks—Career OneStop Official Crosswalk Tables Web site, http://	Electronic Systems Technology 2EXXX	
www.xwalkcenter.org/xw_ackx.html	Electronic Systems Technology 2P0X1	
National Crosswalk Service Cen-	Industrial Management Technology	52.0205
ter. (2006b). Metadata ID No. 7,	Avionic Systems Technology 2A0XX	
Retrieved May 25, 2006, from	Avionic Systems Technology 2A3X1	
http://www.xwalkcenter.org/readme/	Avionic Systems Technology 2A3X2	
7readme.html National Crosswalk Service Center.	Aviation Maintenance Technology 2A3X3	
(2006c). National crosswalk service	Aviation Maintenance Technology 2A5X1	
center, Retrieved May 25, 2006,	Aviation Maintenance Technology 2A5X2	
from http://www.xwalkcenter.org/in-	Avionic Systems Technology 2A5X3	
dex.html	Aviation Maintenance Technology 2A6X1	
North Carolina Community College	Aerospace Ground Equipment Technology 2A6X2	
System. (2006). Curriculum pro-	Aviation Maintenance Technology 2A6X3	
gram titles classification of in- structional programs (CIP Codes).	Aviation Maintenance Technology 2A6X4	
Retrieved September 24, 2006, from	Aviation Maintenance Technology 2A6X5	
http://www.ncccs.cc.nc.us/Pro-	Aviation Maintenance Technology 2A6X6	
grams/docs/Curriculum-Reference-	Aviation Maintenance Technology 2A7X3	
Manual/Section07-18August2006-		
Curriculum-Program-Titles.doc Northern Illinois University. (2006).	Electronic Systems Technology 2EXXX	
June 2, 2006, from http://www.ccp.	Logistics 2G0X1	
niu.edu/ccp/degree_programs/bs_	Electronic Systems Technology 2M0X1	
tech.shtml	Electronic Systems Technology 2P0X1	
Southeast Missouri State University.	Maintenance Production Management 2T3X7	
(2006). Industrial technology (B.S.	Aircraft Armament Systems Technology 2W1X1	
degree completion program). June	Munitions Systems Technology 2W2X1	
2, 2006, from http://www.semo.edu/ extlearn/academics.html#indtech	Mechanical & Electrical Technology 3E1X1	
extream/academics.num#indteen	Mechanical & Electrical Technology 3E4X2	
	Industrial Specialty Technology	15.0699
	Machining Technology	48.0503
	Metals Technology 2A7X1	
	Machining Technology/Tool, Die, and Mold Making	48.0507
	Manufacturing Technology	15.0699
	Manufacturing Technology/Composites	15.0699
	Manufacturing Technology/Integrated Operations	15.0699

8

Figure 1. Procedure for Translating CCAF AAS Degree Programs of Study

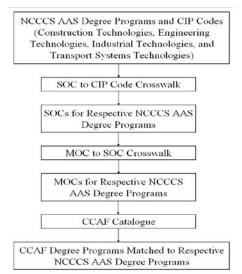


Table 4. CCAF AAS Degree Programs and AFSCs that Correspond to NCCCS Industrial Technologies AAS Degree Programs (continued)

Manufacturing Technology/Plastics	15.0607
Manufacturing Technology/Quality Assurance	15.0702
Nondestructive Testing Technology 2A7X2	
Electronic Systems Technology 2P0X1	
Mechanical Drafting Technology	15.1306
Nondestructive Examination Technology	41.0204
Poultry Processing Machine Technology	2.0209
Pulp and Paper Production Technology	3.0509
Welding Technology	48.0508
Metals Technology 2A7X1	
Welding Technology/Underwater	48.0599

Table 5. CCAF AAS Degree Programs and AFSCs that Correspond to NCCCS Transportation Systems Technologies AAS Degree Programs (continued)

NCCCS Program and Corresponding CCAF AAS Degree Pro- gram Title and AFSC	CIP
Automotive Customizing Technology	47.0603
Automotive Systems Technology	47.0604
Automotive Systems Technology/Race Car Performance	47.0604
Aviation Management & Career Pilot Technology	49.0102
Aviation Systems Technology	47.0607
Avionic Systems Technology 2A0XX	
Avionic Systems Technology 2A3X1	
Avionic Systems Technology 2A3X2	
Aviation Maintenance Technology 2A3X3	
Aviation Maintenance Technology 2A5X1	
Aviation Maintenance Technology 2A5X2	
Avionic Systems Technology 2A5X3	
Aviation Maintenance Technology 2A6X1	
Aviation Maintenance Technology 2A6X3	
Aviation Maintenance Technology 2A6X4	
Aviation Maintenance Technology 2A6X5	
Aviation Maintenance Technology 2A6X6	
Metals Technology 2A7X1	
Aviation Maintenance Technology 2A7X3	
Missile & Space Systems Maintenance 2M0X2	
Heavy Equipment and Transport Technology	47.0605
Vehicle Maintenance 2T3X1	
Vehicle Maintenance 2T3X2	

Table 5. CCAF AAS Degree Programs and AFSCs that Correspond to NCCCS Transportation Systems Technologies AAS Degree Programs (continued)

Heavy Equipment and Transport Technology/Agricultural Systems	47.0605
Vehicle Maintenance 2T3X1	
Vehicle Maintenance 2T3X2	
Heavy Equipment and Transport Technology/Construction Equip- ment Systems	47.0605
Vehicle Maintenance 2T3X1	
Vehicle Maintenance 2T3X2	
Heavy Equipment and Transport Technology/Marine Systems	47.0605
Vehicle Maintenance 2T3X1	
Vehicle Maintenance 2T3X2	
Motorsports Management Technology	52.0299
Recreational Vehicle Maintenance and Repair Technology	47.0699

Table 6. Potential Industrial Technology AAS Degree Programs Administered by theNCCCS List by Program Group

NCCCS AAS Degree Program Group	
NCCCS AAS Degree Program Title	CIP
Biological and Chemical Technologies	
Agriculture Biotechnology	26.1201
Biotechnology	41.0101
Chemical Technology	41.0301
Industrial Pharmaceutical Technology	15.0612
Nanotechnology	26.0203
Business Technologies	
Business Administration/Operations Management	52.0205
Global Logistics Technology	52.0203
Information Systems Security	11.1003
Information Systems Security/Operating Systems	11.1003
Information Systems Security/Security Hardware	11.1003
Networking Technology	11.0901
Web Technologies	11.0401
Public Service Technologies	
Fire Protection Technology	43.0201
General Occupational Technology	24.0102

