

**Certification Form for New Associate of Applied Science Degree
and Certificate Programs
Texas Higher Education Coordinating Board**

Directions: An institution shall use this form to request a new associate of applied science degree or certificate program that meets all criteria for automatic approval in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93.

The institution proposing the program shall notify all public institutions within 50 miles of the teaching site of their intention to offer the program at least 30 days prior to submitting their request to the Coordinating Board. If no objections occur, the Coordinating Board staff shall update the institution's program inventory accordingly. If objections occur, the proposing institution must resolve those objections prior to submitting the request to the Coordinating Board. If the proposing institution cannot resolve the objection(s), and the institution wishes to submit the proposed program, the proposing institution may request the assistance of the Assistant Commissioner of Workforce, Academic Affairs and Research to mediate the objections and determine whether the proposing institution may submit the proposed program. No new program shall be implemented until all objections are resolved.

Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Program Information

1. **Institution:** Collin County Community College
2. **Program Name:** Diagnostic Medical Sonography
3. **Proposed CIP Code:** 51.0910
4. **Number of Required Semester Credit Hours (SCH):** 64

Note: If the number of semester hours required to complete a proposed associate's program exceeds 60, the institution must provide detailed written documentation describing the compelling academic reason for the number of required hours, such as, but not limited to, programmatic accreditation requirements, statutory requirements, or licensure/certification requirements that cannot be met without exceeding the 60-hour limit. The Coordinating Board staff will review the documentation provided and make a determination to approve or deny a request to exceed the 60-hour limit. Institutions of higher education must be in compliance with this subsection before the 2015 fall semester.

5. **Implementation Date:** Report the first semester and year that students would enter the program.
Fall 2017
6. **Contact Person:** Provide contact information for the person who can answer specific questions about the program.

Name: Gary Hodge
Title: Dean of Academic Affairs/Workforce Programs
E-mail: GHodge@collin.edu
Phone: 972.548.6677

Signature Page

I hereby certify that all of the following criteria have been met in accordance with the procedures outlined in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93, and that recent documentation is available to support these criteria:

- (A) The program has institutional and governing board approval;
- (B) The institution has researched and documented current job market need for the program and/or that the program would lead to opportunities for further education;
- (C) There is recent evidence of both short-term and long-term student demand for the program;
- (D) Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program;
- (E) Basic and career technical/workforce skills have been integrated into the curriculum;
- (F) The institution has an enrollment management plan for the program;
- (G) The institution has or will initiate a process to establish articulation agreements for the program with secondary and/or senior level institutions;
- (H) The program is designed to be consistent with the standards of the Southern Association of Colleges and Schools Commission on Colleges of the Southern Association of Colleges and Schools, and with the standards of other applicable accrediting agencies, and is in compliance with appropriate licensing authority requirements;
- (I) The program would not unnecessarily duplicate existing programs at other institutions;
- (J) Representatives from private sector business and industry have been involved in the creation of the program through participation in an advisory committee;
- (K) Adequate funding is available to cover all new costs to the institution over the first five years after the implementation of the program;
- (L) New costs during the first five years of the program would not exceed \$2 million;
- (M) A new associate degree program is not being requested in a program which the institution previously offered an associate degree and has been closed due to low productivity in the last 10 years;
- (N) The institution has an improvement plan in place for all career technical/workforce programs that do not currently meet Board standards for both graduation and placement;
- (O) The appropriate Higher Education Regional Council has been notified in writing of the proposal for a new program, and no unresolved objections to the program have been reported; and
- (P) Skill standards recognized by the Texas Skill Standards Board, if they exist for the discipline, have been reviewed and considered for inclusion in the curriculum for the program.

I understand that the Coordinating Board will update the program inventory for the institution if no objections to the proposed program are received during the 30-day public comment period.

Chief Executive Officer

Date

I hereby certify that the Governing Board has approved this program.

Date of Governing Board approval: _____

Governing Board Officer (or Designee)

Date

COLLIN COLLEGE
Curriculum Outline

Health Science Cluster

AAS - Diagnostic Medical Sonography
64 credit hours

FICE 023614

CIP 51.0910

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Prerequisites							
BIOL	2404	Anatomy and Physiology Basic	3	4	0	112	4
PHYS	1405	Conceptual Physics	3	3	0	96	4
HPRS	1204	Basic Health Profession Skills	1	3	0	64	2
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> ¹	3	1	0	64	3
HPRS	1206	Essentials of Medical Terminology	1	3	0	64	2
Total Hours			11	14	0	400	15
FIRST YEAR							
First Semester			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>	3	1	0	64	3
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> ²	3	0	0	48	3
DMSO	1202	Basic Ultrasound Physics	2	1	0	48	2
DMSO	1210	Introduction to Sonography	2	0	0	32	2
DSVT	1103	Introduction to Vascular Technology	1	0	0	16	1
Total Hours			11	2	0	208	11
Second Semester			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
DMSO	1341	Abdominopelvic Sonography	3	1	0	64	3
DMSO	1251	Sonographic Sectional Anatomy	2	1	0	48	2
DMSO	1242	Intermediate Ultrasound Physics	2	1	0	48	2
DMSO	1360	Clinical - Diagnostic Medical Sonography /Sonographer and Ultrasound Technician	0	0	16	256	3
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> ³	3	0	0	48	3
Total Hours			10	3	16	464	13
SECOND YEAR							
First Semester			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
DMSO	2254	Neurosonology	2	1	0	48	2
DMSO	2341	Sonography of Abdominopelvic Pathology	2	2	0	64	3
DMSO	2362	Clinical - Diagnostic Medical Sonography / Sonographer and Ultrasound Technician	0	0	16	256	3
DMSO	2405	Sonography of Obstetrics/Gynecology	3	1	0	64	4
DMSO	2253	Sonography of Superficial Structures	2	1	0	48	2
Total Hours			9	5	16	480	14
Second Semester			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
<u>PHIL</u>	<u>2306</u>	<u>Introduction to Ethics</u> ⁴	3	0	0	48	3
DMSO	2342	Sonography of High Risk Obstetrics	3	1	0	64	3
DMSO	2367	Practicum (or Field of Experience) - Diagnostic Medical Sonography/Sonographer & Ultrasound Technician	0	0	16	256	3
DMSO	2230	Advanced Ultrasound and Review	2	1	0	48	2
Total Hours			8	2	16	416	11
GRAND TOTAL HOURS			49	26	48	1968	64

1. May substitute MATH 1324, MATH 1342, MATH 1414, or MATH 2312

2. May substitute ANTH 2302, ANTH 2346, ANTH 2351, ECON 1301, ECON 2301, ECON 2302, GOVT 2305, GOVT 2306, HIST 1301, HIST 1302, HIST 2301, SOCI 1301, or SOCI 1306

3. May substitute SPCH 1315, or SPCH 1321

4. Select one of the following: ARTS 1301, ARTS 1303, ARTS 1304, ARTS 1313, DANC 2303, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2366, DRAM 2367, ENGL 2322, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, ENGL 2342, ENGL 2343, HIST 2311, HIST 2312, HIST 2321, HIST 2322, HUMA 1301, MUSI 1306, MUSI 1307, MUSI 1310, PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2307, or PHIL 2321

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Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Program Information

1. **Institution:** Collin County Community College
2. **Program Name:** HVAC - Heating, Ventilation and Air Conditioning
3. **Proposed CIP Code:** 15.0501
4. **Number of Required Semester Credit Hours (SCH):** 60

Note: If the number of semester hours required to complete a proposed associate's program exceeds 60, the institution must provide detailed written documentation describing the compelling academic reason for the number of required hours, such as, but not limited to, programmatic accreditation requirements, statutory requirements, or licensure/certification requirements that cannot be met without exceeding the 60-hour limit. The Coordinating Board staff will review the documentation provided and make a determination to approve or deny a request to exceed the 60-hour limit. Institutions of higher education must be in compliance with this subsection before the 2015 fall semester.

5. **Implementation Date:** Report the first semester and year that students would enter the program.
Fall 2017
6. **Contact Person:** Provide contact information for the person who can answer specific questions about the program.

Name: Jim Barko
Title: Dean of Workforce
E-mail: JBarko@collin.edu
Phone: 972.365.1902

Signature Page

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- (A) The program has institutional and governing board approval;
- (B) The institution has researched and documented current job market need for the program and/or that the program would lead to opportunities for further education;
- (C) There is recent evidence of both short-term and long-term student demand for the program;
- (D) Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program;
- (E) Basic and career technical/workforce skills have been integrated into the curriculum;
- (F) The institution has an enrollment management plan for the program;
- (G) The institution has or will initiate a process to establish articulation agreements for the program with secondary and/or senior level institutions;
- (H) The program is designed to be consistent with the standards of the Southern Association of Colleges and Schools Commission on Colleges of the Southern Association of Colleges and Schools, and with the standards of other applicable accrediting agencies, and is in compliance with appropriate licensing authority requirements;
- (I) The program would not unnecessarily duplicate existing programs at other institutions;
- (J) Representatives from private sector business and industry have been involved in the creation of the program through participation in an advisory committee;
- (K) Adequate funding is available to cover all new costs to the institution over the first five years after the implementation of the program;
- (L) New costs during the first five years of the program would not exceed \$2 million;
- (M) A new associate degree program is not being requested in a program which the institution previously offered an associate degree and has been closed due to low productivity in the last 10 years;
- (N) The institution has an improvement plan in place for all career technical/workforce programs that do not currently meet Board standards for both graduation and placement;
- (O) The appropriate Higher Education Regional Council has been notified in writing of the proposal for a new program, and no unresolved objections to the program have been reported; and
- (P) Skill standards recognized by the Texas Skill Standards Board, if they exist for the discipline, have been reviewed and considered for inclusion in the curriculum for the program.

I understand that the Coordinating Board will update the program inventory for the institution if no objections to the proposed program are received during the 30-day public comment period.

Chief Executive Officer

Date

I hereby certify that the Governing Board has approved this program.

Date of Governing Board approval: _____

Governing Board Officer (or Designee)

Date

**Curriculum Outline
2017-2018**

Manufacturing Career Cluster

AAS - HVAC (Heating, Ventilation, Air Conditioning)

CIP 15.0501

FIRST YEAR

First Semester

			<u>Lec</u>	<u>Lab</u>	<u>Ext</u>	<u>Cont</u>	<u>Credit</u>
ENGL	1301	Composition I	3	1	0	64	3
HART	1256	EPA Recovery Certification Preparation	1	3	0	64	2
HART	1301	Basic Electricity for HVAC	2	3	0	80	3
HART	1307	Refrigeration Principles	2	3	0	80	3
HART	1403	Air Conditioning Control Principles	2	4	0	96	4
Total Hours			10	14	0	384	15

Second Semester

			<u>Lec</u>	<u>Lab</u>	<u>Ext</u>	<u>Cont</u>	<u>Credit</u>
HART	1441	Residential Air Conditioning	2	4	0	96	4
HART	1445	Gas and Electric Heating	2	4	0	96	4
HART	2449	Heat Pumps	2	4	0	96	4
SPCH	1321	Business and Professional Communication ¹	3	0	0	48	3
Total Hours			9	12	0	336	15

SECOND YEAR

First Semester

			<u>Lec</u>	<u>Lab</u>	<u>Ext</u>	<u>Cont</u>	<u>Credit</u>
HART	2436	Air Conditioning Troubelshooting	2	4	0	96	4
HART	2438	Air Conditioning Installation and Startup	2	4	0	96	4
HART	2442	Commercial Refrigeration	2	4	0	96	4
GEN ED		Mathematics General Education Course ²	3	1	0	64	3
Total Hours			9	13	0	352	15

Second Semester

			<u>Lec</u>	<u>Lab</u>	<u>Ext</u>	<u>Cont</u>	<u>Credit</u>
ECON	1301	Introduction to Economics ³	3	0	0	48	3
HART	2268	Practicum - Heating, Air Conditioning and Refrigeration Technology/Technician (Capstone)	0	0	8	128	2
HART	2345	Residential Air Conditioning Systems Design	2	4	0	96	3
HART	2431	Advanced Electricity for HVAC	2	4	0	96	4
GEN ED		Humanities / Fine Arts General Education course ⁴	3	0	0	48	3
Total Hours			10	8	8	416	15

GRAND TOTAL HOURS

1488 60

¹ May substitute SPCH 1311 or SPCH 1315

² Select one of the following: MATH 1314, MATH 1316, MATH 1324, MATH 1325, MATH 1332, MATH 1342, MATH 1350, MATH 1351, MATH 1414, MATH 2305, MATH 2318, MATH 2320, MATH 2412, MATH 2413, MATH 2414 or MATH 2415

³ May substitute ECON 2301, ECON 2302 or PSYC 2301

⁴ Select one of the following: ARTS 1301, ARTS 1303, ARTS 1304, ARTS 1313, DANC 2303, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2366, DRAM 2367, ENGL 2322, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, ENGL 2342, ENGL 2343, HIST 2311, HIST 2312, HIST 2321, HIST 2322, HUMA 1301, MUSI 1306, MUSI 1307, MUSI 1310, PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2306, PHIL 2307, or PHIL 2321

Manufacturing Career Cluster

CIP 15.0501

First Semester

Total Hours	7	13	0	320	12
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HART	1441	Residential Air Conditioning
HART	1445	Gas and Electric Heating
HART	2449	Heat Pumps

	<u>Lec</u>	<u>Lab</u>	<u>Ext</u>	<u>Cont</u>	<u>Credit</u>
	2	4	0	96	4
	2	4	0	96	4
	2	4	0	96	4
Total Hours	6	12	0	288	12

Verification of Workplace Competencies: Obtaining Industry Certification (NATE)

Manufacturing Career Cluster

CIP 15.0501

First Semester

ENGL	1301	Composition I	3	1	0	64	3
HART	1256	EPA Recovery Certification Preparation	1	3	0	64	2
HART	1301	Basic Electricity for HVAC	2	3	0	80	3
HART	1307	Refrigeration Principles	2	3	0	80	3
HART	1403	Air Conditioning Control Principles	2	4	0	96	4
Total Hours			10	14	0	384	15

HART 1441

HART	1445	Gas and Electric Heating	2	4	0	96	4
HART	2449	Heat Pumps	2	4	0	96	4
SPCH	1321	Business and Professional Communication ¹	3	0	0	48	3
Total Hours			9	12	0	336	15

HART 2436

HART	2438	Air Conditioning Installation and Startup	2	4	0	96	4
HART	2442	Commercial Refrigeration	2	4	0	96	4
Total Hours			6	12	288	288	12

GRAND TOTAL HOURS	1008	42
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1 May substitute SPCH 1311 or SPCH 1315

Verification of Workplace Competencies: Obtaining Industry Certification (NATE)

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Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Program Information

1. **Institution:** Collin County Community College
2. **Program Name:** Supply Chain Management
3. **Proposed CIP Code:** 52.0203
4. **Number of Required Semester Credit Hours (SCH):** 60

Note: If the number of semester hours required to complete a proposed associate's program exceeds 60, the institution must provide detailed written documentation describing the compelling academic reason for the number of required hours, such as, but not limited to, programmatic accreditation requirements, statutory requirements, or licensure/certification requirements that cannot be met without exceeding the 60-hour limit. The Coordinating Board staff will review the documentation provided and make a determination to approve or deny a request to exceed the 60-hour limit. Institutions of higher education must be in compliance with this subsection before the 2015 fall semester.

5. **Implementation Date:** Report the first semester and year that students would enter the program.
Fall 2017
6. **Contact Person:** Provide contact information for the person who can answer specific questions about the program.

Name: Jim Barko
Title: Dean of Academic Affairs /Workforce
E-mail: Jbarko@collin.edu
Phone: 469.365.1902

Signature Page

I hereby certify that all of the following criteria have been met in accordance with the procedures outlined in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93, and that recent documentation is available to support these criteria:

- (A) The program has institutional and governing board approval;
- (B) The institution has researched and documented current job market need for the program and/or that the program would lead to opportunities for further education;
- (C) There is recent evidence of both short-term and long-term student demand for the program;
- (D) Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program;
- (E) Basic and career technical/workforce skills have been integrated into the curriculum;
- (F) The institution has an enrollment management plan for the program;
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I understand that the Coordinating Board will update the program inventory for the institution if no objections to the proposed program are received during the 30-day public comment period.

Chief Executive Officer

Date

I hereby certify that the Governing Board has approved this program.

Date of Governing Board approval: _____

Governing Board Officer (or Designee)

Date

COLLIN COLLEGE
Curriculum Outline

Transportation, Distribution and Logistics Cluster

AAS - Supply Chain Management
60 credit hours

FICE 023614

CIP 52.0203

FIRST YEAR

			Lecture	Lab	External	Contact Hours	Credit Hours
First Semester							
BMGT	1313	Principles of Purchasing	3	0	0	48	3
BMGT	1344	Negotiations and Conflict Management	3	0	0	48	3
SPCH	1321	Business and Professional Communication	3	0	0	48	3
ACNT	1303	Introduction to Accounting I ¹	2	2	0	64	3
ENGL	1301	Composition I	3	1	0	64	3
Total Hours			14	3	0	272	15

			Lecture	Lab	External	Contact Hours	Credit Hours
Second Semester							
IBUS	1341	Global Supply Chain Management	3	0	0	48	3
ITSC	1309	Integrated Software Applications I - MS Office	2	2	0	64	3
ECON	1301	Introduction to Economics ²	3	0	0	48	3
BMGT	1307	Team Building	3	0	0	48	3
GEN ED		Humanities / Fine Arts ³	3	0	0	48	3
Total Hours			14	2	0	256	15

SECOND YEAR

			Lecture	Lab	External	Contact Hours	Credit Hours
First Semester							
LMGT	1319	Introduction to Business Logistics	3	0	0	48	3
BMGT	1309	Information and Project Management	3	0	0	48	3
BMGT	2309	Leadership	3	0	0	48	3
BUSI	2301	Business Law	3	0	0	48	3
MATH	1324	Mathematics for Business or Social Sciences ⁴	3	1	0	64	3
Total Hours			15	1	0	256	15

			Lecture	Lab	External	Contact Hours	Credit Hours
Second Semester							
LMGT	2330	International Logistics Management	3	0	0	48	3
LMGT	1325	Warehouse and Distribution Center Management	3	0	0	48	3
BMGT	2303	Problem Solving and Decision Making	3	0	0	48	3
BMGT	1341	Business Ethics	3	0	0	48	3
IBUS	2332	Global Business Simulation (Capstone) ⁵	3	0	0	48	3
Total Hours			15	0	0	240	15

GRAND TOTAL HOURS 58 6 0 1024 60

1. May substitute ACNT 2301

2. May substitute ECON 2301 or ECON 2302

3. Select one of the following: ARTS 1301, ARTS 1303, ARTS 1304, ARTS 1313, DANC 2303, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2366, DRAM 2367, ENGL 2322, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, ENGL 2342, ENGL 2343, HIST 2311, HIST 2312, HIST 2321, HIST 2322, HUMA 1301, MUSI 1306, MUSI 1307, MUSI 1310, PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2306, PHIL 2307, or PHIL 2321

4. May substitute MATH 1332 or 1314

5. May substitute LMGT 2388

COLLIN COLLEGE
Curriculum Outline

Transportation, Distribution and Logistics Cluster

Certificate - Logistics

FICE 023614

CIP 52.0203

18 credit hours

FIRST YEAR

First Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
BMGT	1309	Information and Project Management	3	0	0	48	3
BMGT	2309	Leadership	3	0	0	48	3
LMGT	1319	Introduction to Business Logistics	3	0	0	48	3
Total Hours			9	0	0	144	9

Second Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
BMGT	2303	Problem Solving and Decision Making	3	0	0	48	3
LMGT	1325	Warehouse and Distribution Center Management	3	0	0	48	3
LMGT	2330	International Logistics Management (Capstone)	3	0	0	48	3
Total Hours			9	0	0	144	9

GRAND TOTAL HOURS

18 0 0 288 18

COLLIN COLLEGE
Curriculum Outline

Transportation, Distribution and Logistics Cluster

Certificate - Purchasing

FICE 023614

CIP 52.0203

18 credit hours

FIRST YEAR

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
First Semester							
ACNT	1303	Introduction to Accounting I	2	2	0	64	3
BMGT	1313	Principles of Purchasing	3	0	0	48	3
BMGT	1344	Negotiations and Conflict Management	3	0	0	48	3
Total Hours			8	2	0	160	9
			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Second Semester							
BMGT	1307	Team Building	3	0	0	48	3
IBUS	1341	Global Supply Chain Management (Capstone)	3	0	0	48	3
ITSC	1309	Integrated Software Applications I - MS Office	2	2	0	64	3
Total Hours			8	2	0	160	9
GRAND TOTAL HOURS			16	4	0	320	18

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Texas Higher Education Coordinating Board**

Directions: An institution shall use this form to request a new associate of applied science degree or certificate program that meets all criteria for automatic approval in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93.

The institution proposing the program shall notify all public institutions within 50 miles of the teaching site of their intention to offer the program at least 30 days prior to submitting their request to the Coordinating Board. If no objections occur, the Coordinating Board staff shall update the institution's program inventory accordingly. If objections occur, the proposing institution must resolve those objections prior to submitting the request to the Coordinating Board. If the proposing institution cannot resolve the objection(s), and the institution wishes to submit the proposed program, the proposing institution may request the assistance of the Assistant Commissioner of Workforce, Academic Affairs and Research to mediate the objections and determine whether the proposing institution may submit the proposed program. No new program shall be implemented until all objections are resolved.

Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Program Information

1. **Institution:** Collin County Community College
2. **Program Name:** Welding
3. **Proposed CIP Code:** 48.0508
4. **Number of Required Semester Credit Hours (SCH):** 60

Note: If the number of semester hours required to complete a proposed associate's program exceeds 60, the institution must provide detailed written documentation describing the compelling academic reason for the number of required hours, such as, but not limited to, programmatic accreditation requirements, statutory requirements, or licensure/certification requirements that cannot be met without exceeding the 60-hour limit. The Coordinating Board staff will review the documentation provided and make a determination to approve or deny a request to exceed the 60-hour limit. Institutions of higher education must be in compliance with this subsection before the 2015 fall semester.

5. **Implementation Date:** Report the first semester and year that students would enter the program.
Fall 2017
6. **Contact Person:** Provide contact information for the person who can answer specific questions about the program.

Name: Gaye Cooksey
Title: Dean of Academic Affairs /Workforce
E-mail: Gcooksey@collin.edu
Phone: 972.881.5807

Signature Page

I hereby certify that all of the following criteria have been met in accordance with the procedures outlined in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93, and that recent documentation is available to support these criteria:

- (A) The program has institutional and governing board approval;
- (B) The institution has researched and documented current job market need for the program and/or that the program would lead to opportunities for further education;
- (C) There is recent evidence of both short-term and long-term student demand for the program;
- (D) Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program;
- (E) Basic and career technical/workforce skills have been integrated into the curriculum;
- (F) The institution has an enrollment management plan for the program;
- (G) The institution has or will initiate a process to establish articulation agreements for the program with secondary and/or senior level institutions;
- (H) The program is designed to be consistent with the standards of the Southern Association of Colleges and Schools Commission on Colleges of the Southern Association of Colleges and Schools, and with the standards of other applicable accrediting agencies, and is in compliance with appropriate licensing authority requirements;
- (I) The program would not unnecessarily duplicate existing programs at other institutions;
- (J) Representatives from private sector business and industry have been involved in the creation of the program through participation in an advisory committee;
- (K) Adequate funding is available to cover all new costs to the institution over the first five years after the implementation of the program;
- (L) New costs during the first five years of the program would not exceed \$2 million;
- (M) A new associate degree program is not being requested in a program which the institution previously offered an associate degree and has been closed due to low productivity in the last 10 years;
- (N) The institution has an improvement plan in place for all career technical/workforce programs that do not currently meet Board standards for both graduation and placement;
- (O) The appropriate Higher Education Regional Council has been notified in writing of the proposal for a new program, and no unresolved objections to the program have been reported; and
- (P) Skill standards recognized by the Texas Skill Standards Board, if they exist for the discipline, have been reviewed and considered for inclusion in the curriculum for the program.

I understand that the Coordinating Board will update the program inventory for the institution if no objections to the proposed program are received during the 30-day public comment period.

Chief Executive Officer

Date

I hereby certify that the Governing Board has approved this program.

Date of Governing Board approval: _____

Governing Board Officer (or Designee)

Date

COLLIN COLLEGE Curriculum Outline

ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER

AAS - Welding - Foundry/Metalsmithing Track with Metal Sculpting Focus or Foundry Metalsmithing Focus

FICE 023614

CIP 48.0508

FIRST YEAR

First Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
MATH	1332	Contemporary Mathematics (Quantitative Reasoning) ¹	3	1	0	64	3
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
WLDG	1434	Introduction to Gas Tungsten Arc (GTAW) Welding	2	5	0	112	4
WLDG	1530	Introduction to Gas Metal Arc Welding (GMAW)	3	5	0	128	5
Total Hours			10	16	0	416	16

Second Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
ENGL	1301	Composition I	3	1	0	64	3
SPCH	1321	Business and Professional Communication ²	3	0	0	48	3
WLDG	1401	Metalsmithing	2	5	0	112	4
WLDG	1405	Art Metals	2	5	0	112	4
Total Hours			10	11	0	336	14

SECOND YEAR

First Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
WLDG	1408	Metal Sculpture	2	5	0	112	4
Option 1*			2	5	0	112	4
Option 2*			2	5	0	112	4
GEN ED		Select one Humanities/Fine Arts General Education course ³	3	0	0	48	3
Total Hours			9	15	0	384	15

Second Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	2	5	0	112	4
WLDG	2451	Advanced Gas Tungsten Arc Welding (GTAW)	2	5	0	112	4
Option 3*			2	5	0	112	4
GEN ED		Select one Social/Behavioral Sciences General Education course ⁴	3	0	0	48	3
Total Hours			9	15	0	384	15

GRAND TOTAL HOURS 38 57 0 1520 60

* The options are a three-course sequence focusing on Metal Sculpting or Foundry Metalsmithing. You must take all 3 course options from a single focus.

Metal Sculpting Focus (12 credit hours)

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Option 1	WLDG 2441	Power Hammer	2	5	0	112	4
Option 2	WLDG 2447	Advanced Gas Metal Arc Welding (GMAW)	2	5	0	112	4
Option 3	WLDG 2440	Advance Metal Sculpture (Capstone) ⁵	2	5	0	112	4

Foundry Metalsmithing Focus (12 credit hours)

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Option 1	WLDG 1471	Introduction to Foundry Practices	2	5	0	112	4
Option 2	WLDG 2443	Advanced Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
Option 3	WLDG 2471	Advance Foundry Practices (Capstone) ⁵	2	5	0	112	4

1. May substitute MATH 1314, MATH 1316, MATH 1324, MATH 1325, MATH 1342, MATH 1350, MATH 1351, MATH 1414, MATH 2305, MATH 2318, MATH 2318, MATH 2320, MATH 2412, MATH 2413, MATH 2414, or MATH 2415

2. May substitute SPCH 1311 or SPCH 1315

3. Select one of the following: ARTS 1301, ARTS 1303, ARTS 1304, ARTS 1313, DANC 2303, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2366, DRAM 2367, ENGL 2322, ENGL 2323, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, ENGL 2342, ENGL 2343, HIST 2311, HIST 2312, HIST 2321, HIST 2322, HUMA 1301, MUSI 1306, MUSI 1307, MUSI 1310

4. Select one of the following: ANTH 2302, ANTH 2346, ANTH 2351, ECON 1301, ECON 2301, ECON 2302, GOVT 2305, GOVT 2306, HIST 1301, HIST 1302, HIST 2301, PSYC 2301, SOCI 1301, SOCI 1306

5. May substitute WLDG 2480, with consent of Discipline Lead

COLLIN COLLEGE Curriculum Outline

ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER

Certificate - Level I - Foundry/Metalsmithing

FICE 023614

CIP 48.0508

with Metal Sculpting Focus or Foundry Metalsmithing Focus

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
FIRST YEAR							
First Semester							
WLDG	1401	Metalsmithing	2	5	0	112	4
WLDG	1405	Art Metals	2	5	0	112	4
WLDG	1434	Introduction to Gas Tungsten Arc (GTAW) Welding	2	5	0	112	4
WLDG	1530	Introduction to Gas Metal Arc Welding (GMAW)	3	5	0	128	5
TOTAL HOURS			9	20	0	464	17
			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Second Semester							
WLDG	1408	Metal Sculpture	2	5	0	112	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
WLDG	2451	Advanced Gas Tungsten Arc Welding (GTAW)	2	5	0	112	4
TOTAL HOURS			6	15	0	336	12
			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
SECOND YEAR							
First Semester							
Option 1*			2	5	0	112	4
Option 2*			2	5	0	112	4
Option 3*			2	5	0	112	4
TOTAL HOURS			6	15	0	336	12
GRAND TOTAL HOURS			21	50	0	1136	41

* The options are a three-course sequence focusing on Metal Sculpting or Foundry Metalsmithing. You must take all 3 course options from a single focus.

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
* Metal Sculpting Focus (12 credit hours)							
Option 1:	WLDG 2441	Power Hammer	2	5	0	112	4
Option 2:	WLDG 2447	Advanced Gas Metal Arc Welding (GMAW)	2	5	0	112	4
Option 3:	WLDG 2440	Advanced Metal Sculpture (Capstone) ¹	2	5	0	112	4
* Foundry Metalsmithing Focus (12 credit hours)							
Option 1:	WLDG 1471	Introduction to Foundry Practices	2	5	0	112	4
Option 2:	WLDG 2443	Advanced Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
Option 3:	WLDG 2471	Advance Foundry Practices (Capstone) ¹	2	5	0	112	4

1. May substitute WLDG 2480, with consent of Discipline Lead

COLLIN COLLEGE
Curriculum Outline

ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER

AAS - Welding - Welding Technology Track

FICE 023614

CIP 48.0508

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
FIRST YEAR							
First Semester							
MATH	1332	Contemporary Mathematics (Quantitative Reasoning) ¹	3	1	0	64	3
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
WLDG	1434	Introduction to Gas Tungsten Arc (GTAW) Welding	2	5	0	112	4
WLDG	1530	Introduction to Gas Metal Arc Welding (GMAW)	3	5	0	128	5
Total Hours			10	16	0	416	16
			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Second Semester							
ENGL	1301	Composition I	3	1	0	64	3
SPCH	1321	Business and Professional Communication ²	3	0	0	48	3
WLDG	1413	Introduction to Blueprint Reading for Welders	2	5	0	112	4
WLDG	1435	Introduction to Pipe Welding	2	5	0	112	4
Total Hours			10	11	0	336	14
			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
SECOND YEAR							
First Semester							
WLDG	2451	Advanced Gas Tungsten Arc Welding (GTAW)	2	5	0	112	4
WLDG	2443	Advanced Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
WLDG	2453	Advanced Pipe Welding ³	2	5	0	112	4
GEN ED		Select one Humanities/Fine Arts General Education course ⁴	3	0	0	48	3
Total Hours			9	15	0	384	15
			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
Second Semester							
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	2	5	0	112	4
WLDG	2413	Intermediate Welding Using Multiple Processes (Capstone) ⁵	2	5	0	112	4
WLDG	2431	Advanced Blueprint Interpretation and Cost Analysis	2	5	0	112	4
GEN ED		Select one Social/Behavioral Sciences General Education course ⁶	3	0	0	48	3
Total Hours			9	15	0	384	15
GRAND TOTAL HOURS			38	57	0	1520	60

1. May substitute MATH 1314, MATH 1316, MATH 1324, MATH 1325, MATH 1342, MATH 1350, MATH 1351, MATH 1414, MATH 2305, MATH 2318, MATH 2318, MATH 2320, MATH 2412, MATH 2413, MATH 2414, or MATH 2415

2. May substitute SPCH 1311 or SPCH 1315

3. May substitute WLDG 2450

4. Select one of the following: ARTS 1301, ARTS 1303, ARTS 1304, ARTS 1313, DANC 2303, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2366, DRAM 2367, ENGL 2322, ENGL 2323, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, ENGL 2342, ENGL 2343, HIST 2311, HIST 2312, HIST 2321, HIST 2322, HUMA 1301, MUSI 1306, MUSI 1307, MUSI 1310

5. May substitute WLDG 2480, with consent of Discipline Lead

6. Select one of the following: ANTH 2302, ANTH 2346, ANTH 2351, ECON 1301, ECON 2301, ECON 2302, GOVT 2305, GOVT 2306, HIST 1301, HIST 1302, HIST 2301, PSYC 2301, SOCI 1301, SOCI 1306

COLLIN COLLEGE
Curriculum Outline

ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER

Certificate - Level I - Welding Technology

FICE 023614

CIP 48.0508

FIRST YEAR

First Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
WLDG	1434	Introduction to Gas Tungsten Arc (GTAW) Welding	2	5	0	112	4
WLDG	1435	Introduction to Pipe Welding	2	5	0	112	4
TOTAL HOURS			6	15	0	336	12

Second Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
WLDG	1413	Introduction to Blueprint Reading for Welders	2	5	0	112	4
WLDG	2443	Advanced Shielded Metal Arc Welding (SMAW)	2	5	0	112	4
WLDG	2451	Advanced Gas Tungsten Arc Welding (GTAW)	2	5	0	112	4
TOTAL HOURS			6	15	0	336	12

SECOND YEAR

First Semester

			<u>Lecture</u>	<u>Lab</u>	<u>External</u>	<u>Contact Hours</u>	<u>Credit Hours</u>
WLDG	2431	Advanced Blueprint Interpretation and Cost Analysis	2	5	0	112	4
WLDG	2413	Intermediate Welding Using Multiple Processes (Capstone) ¹	2	5	0	112	4
WLDG	2453	Advanced Pipe Welding ²	2	5	0	112	4
TOTAL HOURS			6	15	0	336	12
GRAND TOTAL HOURS			18	45	0	1008	36

1. May substitute WLDG 2480, with consent of Discipline Lead

2. May substitute WLDG 2450, with consent of Discipline Lead