

Model #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
00109-09	Introduction to Materials Handling	5	Portions of this may be included in Safety module
29101-09	Welding Safety	5	May include SMAW-Equipment and Setup
29102-09	Oxy fuel Cutting	15	Can begin as soon as required safety needs are met
29105-09	Base Metal Preparation	10	Can begin during power tool demos and practice.
29107-09	SMAW-Equipment and Setup	10	Can begin during Welding Safety
29109-09	SMAW-Beads and Fillet Welds (Start)	*	*Can begin as soon as required safety needs are met
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	4 scheduled sessions during the course plus regular follow-up with section(s) and chapter. *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	4 scheduled sessions during this course plus regular follow-up with section(s), chapter. In school competitions with industry judges. *These are graded exercises
Total Hours		153	

Module #	Name	Suggested Hours	Notes
NCCER Core and Welding 1 Modules	NCCER Core and Welding 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Welding 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
29109-9 (continued)	SMAW-Beads and Fillet Welds	89	
29106-9	Weld Quality	20	
29110-9	Joint Fit-Up and Alignment	10	
29103-9	Plasma Arc Cutting	10	
Tools for Success Module 4	TEAMWORK "GETTING ALONG WITH YOUR CO-WORKERS"	3	
Tools for Success Module 9	"RESOLVING CONFLICT"	2	
Tools for Success Module 10	"RECEIVING CRITICISM"	2	
Tools for Success Module 12	"SUBSTANCE ABUSE ON THE JOB"	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate</i> Training	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core and Welding 1 & 2 Modules	NCCER Core and Welding 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Welding 1 & Welding 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
29201-09	Welding Symbols	10	
29104-09	Air Carbon Arc Cutting and Gouging	20	
29111-09	SMAW-Groove Welds with Backing	40	
29112-09	SMAW-Open V-Groove Welds (Start)	57	
Tools for Success Module 2	PROFFESIONALISM "KEEPING YOUR JOB"	6	
Tools for Success Module 3	"BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR"	3	
Tools for Success Module 4	"SEXUAL HARASSMENT"	2	
Tools for Success	"MANAGING YOUR CAREER"	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total	160	

NCCER Welding 4

140 hours to 160 hours

Course #432904

Module #	Name	Suggested Hours	Notes
NCCER Core and Welding 1, 2, and 3 Modules	NCCER Core and Welding 1,2,&3 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Welding 1, Welding 2, & Welding 3 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
29112-09	Open V-Groove Welds	60	Emphasis on AWS Testing
29212-09	Reading Welding Detail Drawings	20	
29505-09	GMAW & FCAW	10	
29606-09	GMAW & FCAW - Plate (Begin)	50	Emphasis on skills needed for employment
Tools for Success	"MANAGING YOUR CAREER" (Abbreviated Version)	2	This review should place emphasis on future high school courses or plans for further education / training / employment after high school.
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate</i> Training	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total	160	

Module #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
00109-09	Introduction to Materials Handling	5	Portions of this may be included in Safety module
26101-14	Orientation to the Electrical Trades	5	
26102-14	Electric Safety	10	
26103-14	Introduction to Electric Circuits	30	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	158	

Module #	Name	Suggested Hours	Notes
NCCER Core and Electrical 1 Modules	NCCER Core and Electrical 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Electrical 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
26104-14	Electric Theory	15	
26105-14	Introduction to the NEC	15	
26108-14	Raceways & Fittings	30	Incorporate project-based learning activities
26109-14	Conductors and Cables	20	Incorporate project-based learning activities
26106-14	Device Boxes	20	Incorporate project-based learning activities
26111-14 (Begin)	Residential Electrical Services	30	Incorporate project-based learning activities
Tools for Success Module 4	"TEAMWORK: GETTING ALONG WITH YOUR CO-WORKERS"	3	
Tools for Success Module 9	"RESOLVING CONFLICT"	2	
Tools for Success Module 10	"RECEIVING CRITICISM"	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB"	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core and Electrical 1 & 2 Modules	NCCER Core and Electrical 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Electrical 1 & Electrical 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
26107-14	Hand Bending	15	Incorporate project-based learning activities
26110-14	Basic Electrical Construction Drawings	15	Incorporate project-based learning activities
26112-14	Electrical test Equipment	10	Incorporate project-based learning activities
26111-14	Residential Electrical Services		Incorporate project-based learning activities
26204-14 or content	Conduit Bending	30	Incorporate project-based learning activities LEA's are encouraged to use NCCER module & tests for additional credential
26201-14 or content	Alternating Current	40	LEA's are encouraged to use NCCER module & tests for additional credential
26206-14 or content	Conductor Installations	15	Incorporate project-based learning activities LEA's are encouraged to use NCCER module & tests for additional credential
Tools for Success Module 2	PROFFESIONALISM: "KEEPING YOUR JOB"	6	
Tools for Success Module 3	""BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR"	3	
Tools for Success Module 4	"SEXUAL HARASSMENT"	2	
Tools for Success	"MANAGING YOUR CAREER"	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total	160	

Module #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
00109-09	Introduction to Materials Handling	5	Portions of this may be included in Safety module
03101-13	Introduction to HVAC	10	
03102-13	Trade Mathematics	15	
03106-13	Basic Electricity	25	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	158	

Module #	Name	Suggested Hours	Notes
NCCER Core and HVAC1 Modules	NCCER Core and Electrical 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from HVAC 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
03108-13	Introduction to Heating	15	
03107-13	Introduction to Cooling	50	
03109-13	Intro to Air Distribution Systems	30	
03104-13	Soldering and Brazing	15	
03103-13	Basic Copper and Plastic Piping Practices	20	
Tools for Success Module 4	TEAMWORK: "GETTING ALONG WITH YOUR CO-WORKERS"	3	
Tools for Success Module 9	"RESOLVING CONFLICT"	2	
Tools for Success Module 10	"RECEIVING CRITICISM"	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB"	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core and HVAC 1 & 2 Modules	NCCER Core and Electrical 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from HVAC 1 & HVAC 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
03105-13	Basic Carbon Steel Piping Practices	20	LEA's are encouraged to use NCCER module & credential
03206-13	Alternating Current	15	LEA's are encouraged to use NCCER module & credential
03302-13	Compressors	35	LEA's are encouraged to use NCCER module & credential
03301-13	Refrigerants and Oils	25	LEA's are encouraged to use NCCER module & credential
03215-13	Basic Maintenance	25	LEA's are encouraged to use NCCER module & credential
Tools for Success Module 2	PROFFESIONALISM: "KEEPING YOUR JOB"	6	
Tools for Success Module 3	""BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR"	3	
Tools for Success Module 4	"SEXUAL HARASSMENT"	2	
Tools for Success	"MANAGING YOUR CAREER"	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate</i> Training	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	155	

NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
32101-07	Orientation to the Trade	5	
32102-07	Tools of the Trade	10	
32103-07	Fasteners and Anchors	10	
32104-07	Oxy fuel Cutting	27	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: • *Discuss / Learn Motto • *Discuss / Learn Theme • *Discuss / Learn Pledge • *Discuss / Learn Creed • Deliver Elevator Speech • Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. • Submit Membership per established deadlines • Develop/conduct a balanced Program of Work • Establish Section Officers • Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development • *Jobs Skills Demonstration A • *Prepared Speech • Portions of course-specific Technical Contest • Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
Total Hours		160	

Module #	Name	Suggested Hours	Notes
NCCER Core and IM - Mech 1 Modules	NCCER Core and IM-Mech 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from IM-Mech 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
32105-07	Gaskets and Packing	20	
32106-07	Craft-Related Mathematics	30	
32107-07	Construction Drawings	25	
32108-07	Pumps and Drivers	15	
32109-07	Valves	15	
	Training to meet local employment or dual enrollment needs	25	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 4	“TEAMWORK: GETTING ALONG WITH YOUR CO-WORKERS”	3	
Tools for Success Module 9	“RESOLVING CONFLICT”	2	
Tools for Success Module 10	“RECEIVING CRITICISM”	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB”	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: • *Discuss / Learn Motto • *Discuss / Learn Theme • *Discuss / Learn Pledge • *Discuss / Learn Creed • Deliver Elevator Speech • Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. • Submit Membership per established deadlines • Develop/conduct a balanced Program of Work • Establish Section Officers • Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development • *Jobs Skills Demonstration A • *Prepared Speech • Portions of course-specific Technical Contest • Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core and IM-Mech 1 & 2 Modules	NCCER Core and IM - Mech 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from IM – Mech. 1 & 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
32105-07	Introduction to Test Instruments	15	
32106-07	Material Handling and Hand Rigging	20	
32108-07	Mobile and Support Equipment	20	
32109-07	Lubrication	20	
	Training to meet local employment or dual enrollment needs	40	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 2	“PROFFESIONALISM: KEEPING YOUR JOB”	6	
Tools for Success Module 3	“BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR”	3	
Tools for Success Module 4	“SEXUAL HARASSMENT”	2	
Tools for Success	“MANAGING YOUR CAREER”	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	150	

NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
32101-07	Orientation to the Trade	5	
32102-07	Tools of the Trade	10	
32103-07	Fasteners and Anchors	10	
32104-07	Oxy fuel Cutting	27	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings <i>*These can be written or spoken graded exercises</i>
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation <i>*These are graded exercises</i>
Total Hours		160	

Module #	Name	Suggested Hours	Notes
NCCER Core and IM - Mech 1 Modules	NCCER Core and IM-Mech 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from IM-Mech 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
32105-07	Gaskets and Packing	20	
32106-07	Craft-Related Mathematics	30	
32107-07	Construction Drawings	25	
32108-07	Pumps and Drivers	15	
32109-07	Valves	15	
	Training to meet local employment or dual enrollment needs	25	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 4	“TEAMWORK: GETTING ALONG WITH YOUR CO-WORKERS”	3	
Tools for Success Module 9	“RESOLVING CONFLICT”	2	
Tools for Success Module 10	“RECEIVING CRITICISM”	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB”	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: • *Discuss / Learn Motto • *Discuss / Learn Theme • *Discuss / Learn Pledge • *Discuss / Learn Creed • Deliver Elevator Speech • Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. • Submit Membership per established deadlines • Develop/conduct a balanced Program of Work • Establish Section Officers • Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development • *Jobs Skills Demonstration A • *Prepared Speech • Portions of course-specific Technical Contest • Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core and IM-Mech 1 & 2 Modules	NCCER Core and IM - Mech 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from IM – Mech. 1 & 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
32105-07	Introduction to Test Instruments	15	
32106-07	Material Handling and Hand Rigging	20	
32108-07	Mobile and Support Equipment	20	
32109-07	Lubrication	20	
	Training to meet local employment or dual enrollment needs	40	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 2	“PROFFESIONALISM: KEEPING YOUR JOB”	6	
Tools for Success Module 3	“BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR”	3	
Tools for Success Module 4	“SEXUAL HARASSMENT”	2	
Tools for Success	“MANAGING YOUR CAREER”	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	150	

NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	12	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
27101-13	Orientation to the Trade	5	
27102-13	Building Materials, Fasteners, and Adhesives	30	
27103-13	Hand and Power Tools	10	Can be taught along with Core 00103 and Core 00104
27104-13	Introduction to Construction Drawings, Specifications, and Layout	10	Can be taught along with Core 00105 and Continue in next Course
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
Total Hours		160	

NCCER Carpentry 2

140 hours to 160 hours

Course #432302

Module #	Name	Suggested Hours	Notes
NCCER Core and Carpentry 1 Modules	NCCER Core and Carpentry 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Carpentry 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
27104-13	Introduction to Construction Drawings, Specifications, and Layout	30	
27105-13	Floor Systems	40	
27111-13	Wall Systems	20	
27112-13	Ceiling Joist and Roof Framing	40	Continue in Next Course
Tools for Success Module 4	"TEAMWORK: GETTING ALONG WITH YOUR CO-WORKERS"	3	
Tools for Success Module 9	"RESOLVING CONFLICT"	2	
Tools for Success Module 10	"RECEIVING CRITICISM"	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB"	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

NCCER Carpentry 3

140 hours to 160 Hours

Course #432303

Module #	Name	Suggested Hours	Notes
NCCER Core and Carpentry 1 & 2 Modules	NCCER Core and Carpentry 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Carpentry 1 & 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
27112-13	Ceiling Joist and Roof Framing	40	Continue in Next Course
27110-13	Basic Stair Layout	25	
27109-13	Introduction to Building Envelope Systems	20	
	Training to meet local employment or dual enrollment needs	40	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 2	“PROFESSIONALISM: KEEPING YOUR JOB”	6	
Tools for Success Module 3	“BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR”	3	
Tools for Success Module 4	“SEXUAL HARASSMENT”	2	
Tools for Success	“MANAGING YOUR CAREER”	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have successfully</u> completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
68102-09 27108-06	Introduction to Concrete, Reinforcing Materials, and Forms	10	
68106-09 27105-06	Floor Systems (Begin)	35	
68107-09 27106-06	Wall and Ceiling Framing (Begin)	30	
68108-09 27107-06	Roof Framing (Begin)	50	
68111-09 27110-06	Basic Stair Layout	12	
SIC018	Employability Worksheet w/rubric	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. • Submit Membership per established deadlines • Develop/conduct a balanced Program of Work • Establish Section Officers • Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: • *Discuss / Learn Motto • *Discuss / Learn Theme • *Discuss / Learn Pledge • *Discuss / Learn Creed • Deliver Elevator Speech • Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development • *Jobs Skills Demonstration A • *Prepared Speech • Portions of course-specific Technical Contest • Participate in District activities and contests	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. • Submit Membership per established deadlines • Develop/conduct a balanced Program of Work • Establish Section Officers • Documentation from activities/meetings *These can be written or spoken graded exercises
	Total Hours	155	

Module #	Name	Suggested Hours	Notes
NCCER Core and Building Const 1 Modules	NCCER Core and Building Construction 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Core and Bldg. Const. 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
68101-09 27401-08	Site Layout One – Distance Measurement and Leveling	25	
68102-09 27108-06	Introduction to Concrete, Reinforcing Materials and Forms	5	
68103-09 27305-07	Handling and Placing Concrete	20	
68104-09 28101-04	Introduction to Masonry	20	
68105-09 28105-04	Masonry Units & Installation Techniques	60	
Tools for Success Module 4	“TEAMWORK: GETTING ALONG WITH YOUR CO-WORKERS”	3	
Tools for Success Module 9	“RESOLVING CONFLICT”	2	
Tools for Success Module 10	“RECEIVING CRITICISM”	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB”	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: • *Discuss / Learn Motto • *Discuss / Learn Theme • *Discuss / Learn Pledge • *Discuss / Learn Creed • Deliver Elevator Speech • Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. • Submit Membership per established deadlines • Develop/conduct a balanced Program of Work • Establish Section Officers • Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development • *Jobs Skills Demonstration A • *Prepared Speech • Portions of course-specific Technical Contest • Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	160	

Module #	Name	Suggested Hours	Notes
NCCER Core and Building Const 1 & 2 Modules	NCCER Core and Building Construction 1 and 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Core and Bldg. Const. 1 and 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
68112-09 26102-08	Electrical Safety	10	
68113-09 26111-08	Residential Electrical Services	15	
68114-09 03101-07	Introduction to HVAC	10	
68115-09 02112-05	Introduction to Drain, Waste, and Vent Systems	10	
68116-09 02106-05	Plastic Pipe and Fittings	10	
68117-09 02107-05	Copper Pipe and Fittings	10	
	Training to meet local employment or dual enrollment needs	60	LEA's are encouraged to use appropriate NCCER modules & credentials from the Drywall or Carpentry curriculum
Tools for Success Module 2	""PROFFESIONALISM: KEEPING YOUR JOB""	6	
Tools for Success Module 3	""BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR""	3	
Tools for Success Module 4	""SEXUAL HARASSMENT""	2	
Tools for Success	""MANAGING YOUR CAREER""	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total	158	

Module #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core Agri-science, they may proceed to their pathway course i.e. NCCER Welding 1	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
00109-09	Introduction to Materials Handling	5	Portions of this may be included in Safety module
	Determined by LEA to meet C/T Student needs in preparation for additional Tech Ed and/or NCCER Courses.	40	It is recommended that this course provide exploratory opportunities in technical areas supported by the LEA.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	153	

Module #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
00109-09	Introduction to Materials Handling	5	Portions of this may be included in Safety module
28101-13	Introduction to Masonry	15	
28106-13	Masonry Safety	15	May be taught with Core Safety
28102-13	Masonry Tools and Equipment	15	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	158	

Module #	Name	Suggested Hours	Notes
NCCER Core and Masonry 1 Modules	NCCER Core and Masonry 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Masonry 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
28103-13	Measurements, Drawings and Specifications	20	
28104-13	Mortar	20	
28105-13	Masonry Units and Installation Techniques	80	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 4	TEAMWORK "GETTING ALONG WITH YOUR CO-WORKERS"	3	
Tools for Success Module 9	"RESOLVING CONFLICT"	2	
Tools for Success Module 10	"RECEIVING CRITICISM"	2	
Tools for Success Module 12	"SUBSTANCE ABUSE ON THE JOB"	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	150	

Module #	Name	Suggested Hours	Notes
NCCER Core and Masonry 1 & 2 Modules	NCCER Core and Masonry 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Masonry 1 & Masonry 2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
28201-13	Residential Plans and Drawings	15	LEA's are encouraged to use NCCER module & credential
28202-13	Residential Masonry	25	LEA's are encouraged to use NCCER module & credential
28201-13	Reinforced Masonry	20	LEA's are encouraged to use NCCER module & credential
28201-13	Masonry Openings and Metalwork	20	LEA's are encouraged to use NCCER module & credential
	Guided Practice for skills mastery	40	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 2	PROFFESIONALISM "KEEPING YOUR JOB"	6	
Tools for Success Module 3	""BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR"	3	
Tools for Success Module 4	"SEXUAL HARASSMENT"	2	
Tools for Success	"MANAGING YOUR CAREER"	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate</i> Training	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total	115	

Module #	Name	Suggested Hours	Notes
NCCER Core	If student(s) have had NCCER Core in Foundation Course #430004 or Agri-science.	As needed	Students <u>who have</u> successfully completed NCCER Core will be able to work ahead or proceed with appropriate hands-on practice to the degree deemed safe by the teacher after they are instructed and tested in LEA required safety. Students <u>who have not</u> successfully completed both the written and performance sections of NCCER modules for Core will restudy and retest in the modules needed during this course.
00101-09	Basic Safety	15	Teach and demo with Hand Tools and Power Tools. Incorporate lab-based instruction and practice. Module & Performance test with 100% Safety Test. Reinforce throughout the course.
00102-09	Introduction to Construction Math	10	Use early pre-testing to identify student needs. Incorporate lab-based instruction and practice. Pre- test prior to module testing to allow "testing out". Include math practice in all modules i.e. "Specifications"
00103-09	Introduction to Hand Tools	10	May teach with Safety for <i>100% Safety Test</i> for hand tools.
00104-09	Introduction to Power Tools	10	May teach with Safety for <i>100% Safety Test</i> for power tools.
00105-09	Introduction to Construction Drawings	10	May add drawings specific to the program taught. Can be taught with math module for added practice and application.
00106-09	Basic Rigging	15	Optional but recommended for programs leading to careers in heavy industry
00107-09	Basic Communication Skills	10	May be incorporated in SkillsUSA activities
00108-09	Basic Employability Skills	10	May be incorporated in SkillsUSA activities
00109-09	Introduction to Materials Handling	5	Portions of this may be included in Safety module
Various Texts (See MSSC)	Introduction to Advanced Manufacturing	30	LEA's are encouraged to use MSSC based CPT modules & credential http://www.msscusa.org/production-certification-cpt/
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Begin Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	143	

Module #	Name	Suggested Hours	Notes
NCCER Core and Manufacturing 1 Modules	NCCER Core and Manufacturing 1 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER modules from Manufacturing 1 must be given opportunities to restudy and retest during this course.
Tools for Success	Introduction	2	
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
Various Texts (See MSSC)	Mathematics for Technicians 1	20	LEA's are to use MSSC based CPT modules for student credentialing
Various Texts (See MSSC)	Introduction to Lean Manufacturing	20	LEA's are to use MSSC based CPT modules for student credentialing
Various Texts (See MSSC)	Lubrication for Technicians	20	LEA's are to use MSSC based CPT modules for student credentialing
Various Texts (See MSSC)	Mechanical Fasteners	20	LEA's are to use MSSC based CPT modules for student credentialing
	Training to meet local employment, credentialing or dual enrollment needs	40	For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 4	"TEAMWORK: GETTING ALONG WITH YOUR CO-WORKERS"	3	
Tools for Success Module 9	"RESOLVING CONFLICT"	2	
Tools for Success Module 10	"RECEIVING CRITICISM"	2	
Tools for Success Module 12	SUBSTANCE ABUSE ON THE JOB"	3	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech - Portions of course-specific Technical Contest - Participate in District activities and contests	6	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total Hours	150	

Manufacturing 3

140 hours to 160 hours

Course #540062

Module #	Name	Suggested Hours	Notes
NCCER Core and Manufacturing 1 & 2 Modules	NCCER Core and Manufacturing 1 & 2 Modules	As needed	Students who have not successfully completed both the written and performance sections of NCCER Core modules from Manufacturing 1&2 must be given opportunities to restudy and retest during this course.
SIC018	Employability Worksheet w/rubric	6	3 sessions during the course plus regular follow-up with students
Various Texts (See MSSC)	Mathematics for Technicians 2	20	LEA's are encouraged to use MSSC based CPT modules & credential
Various Texts (See MSSC)	Mechanical and Precision Measurement	20	LEA's are encouraged to use MSSC based CPT modules & credential
Various Texts (See MSSC)	Quality Control	20	LEA's are encouraged to use MSSC based CPT modules & credential
Various Texts (See MSSC)	Training to meet local employment, credentialing or dual enrollment needs	60	LEA's are encouraged to use MSSC based CPT modules & credential For all articulation and dual enrollment you should use the appropriate college POI for content and mastery
Tools for Success Module 2	""PROFFESIONALISM: KEEPING YOUR JOB"	6	
Tools for Success Module 3	""BUILDING A STRONG RELATIONSHIP WITH YOUR SUPERVISOR"	3	
Tools for Success Module 4	"SEXUAL HARASSMENT"	2	
Tools for Success	"MANAGING YOUR CAREER"	4	
SkillsUSA On-line and printed Resources	SkillsUSA Membership Activities: *Discuss / Learn Motto *Discuss / Learn Theme *Discuss / Learn Pledge *Discuss / Learn Creed - Deliver Elevator Speech - Complete Level 1 of SkillsUSA PDP program or <i>Activate Training</i>	6	Conduct 4 scheduled meetings during the course/year plus regular follow-up with section(s) and chapter. - Submit Membership per established deadlines - Develop/conduct a balanced Program of Work - Establish Section Officers - Documentation from activities/meetings *These can be written or spoken graded exercises
SkillsUSA Technical Standards and Contest Projects CD	Technical development *Jobs Skills Demonstration A *Prepared Speech *Job Interview - Portions of course-specific Technical Contest - Participate in District activities and contests	8	Can be part of the 4 scheduled meetings during the course/year plus regular follow-up with section(s), chapter. Conduct in school competitions with industry judges and advisory committee member participation *These are graded exercises
	Total	155	

