

(EXAMPLE)

STANDARDS OF APPRENTICESHIP

DEVELOPED BY THE

**(INSERT EMPLOYERS' NAMES OR EMPLOYER
GROUP NAME OR ASSOCIATION)**

FOR THE OCCUPATION OF

MECHATRONICS TECHNICIAN

O*NET-SOC CODE: 49-2094.00

RAPIDS CODE: 2014CB

APPROVED BY

(REGISTRATION AGENCY)

These "model" National Guidelines for Apprenticeship Standards are an example of how to develop apprenticeship standards that will comply with Title 29, CFR parts 29 and 30 when tailored to a sponsor's apprenticeship program. These model Standards do not create new legal requirements or change current legal requirements. The legal requirements related to apprenticeship that apply to registered apprenticeship programs are contained in 29 U.S.C. 50 and Title 29, CFR parts 29 and 30. Every effort has been made to ensure that the information in the model Apprenticeship Standards is accurate and up-to-date.

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FOREWORD

These Standards of Apprenticeship were developed in accordance with the basic standards recommended by the U.S. Department of Labor, Office of Apprenticeship, as a basis from which the Industrial Maintenance Training Center (IMTC) can work to establish an apprenticeship training program that meets the particular needs of the area.

OUR BUSINESS NEED

The IMTC is a coalition of manufacturing companies dedicated to preparing industrial maintenance and mechatronics technicians for careers in world-class manufacturing. IMTC's mission is to support America's manufacturing sector with world-class workforce training and education in the skills and technologies required for industrial maintenance and high-performance manufacturing operations. To utilize the latest automated technologies in their operations, companies need high skilled maintenance employees and IMTC's goal is to ensure the availability of a fully trained workforce.

In collaboration with PMMI - The Association for Packaging and Processing Technologies, and the Mid-Atlantic Mechatronics Advisory Council (MAMAC), IMTC is bringing together community and technical colleges to form the Industrial Maintenance and Mechatronics Apprenticeship System.

OUR APPROACH

Industrial maintenance and mechatronics is a rapidly advancing technological field. Surveys show that the gap is significant and widening between the training needs of the manufacturing sector and the capabilities of career and technology centers and community and technical colleges to provide relevant training. These National Guidelines for Apprenticeship Standards are the foundation on which the IMTC will establish the Industrial Maintenance and Mechatronics Apprenticeship System to provide an avenue to develop high skilled talent for its manufacturing partners.

The National Guidelines for Apprenticeship Standards include a pathway of Industrial Maintenance and Mechatronics occupations that lead to the development of Mechatronics Technicians that have been aligned with the 24 PMMI sanctioned certificates. Depending on a company's job requirements, core certificates are selected that correspond to the skills and knowledge that are relevant to the company's specific work environment.

Building apprenticeship programs that meet the needs of each manufacturing company is our goal. Developing competent Industrial Maintenance and Mechatronics Technicians along a pathway that leads to the development of Mechatronics Technicians is how this goal will be measured. Each competency-based apprenticeship program will provide sufficient on-the-job learning and related technical instruction to enable the apprentice to attain the required company competencies.

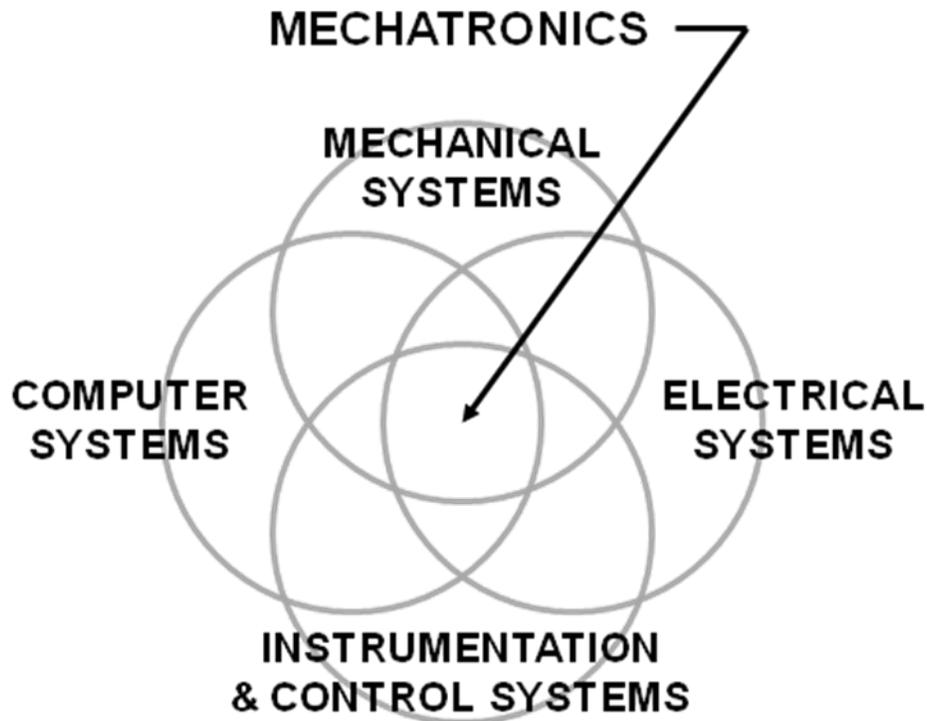
The partnering company will determine when the apprentice satisfactorily completes all competency requirements, including the hours of structured on the job learning, the hours of related instruction, and the attainment of PMMI core certificates. The partnering company will request a Certificate of Completion of Apprenticeship when the apprentice demonstrates a level of competency and proficiency equivalent to the company's journeyworker-level employee.

OUR APPRENTICESHIP STRATEGY

These National Guidelines for Apprenticeship Standards will set the foundation for growth within America's manufacturing sector. Competency-based apprenticeship programs will provide world-class workforce training and education in the skills and technologies required in high-performance manufacturing companies. These Industrial Maintenance and Mechatronics apprentices who are moving toward becoming fully-competent and proficient Mechatronics Technicians will focus on learning core competencies recognized nationally and validated by PMMI and the Mid-Atlantic Mechatronics Advisory Council (MAMAC).

MECHATRONICS CERTIFICATE PROGRAM

The Mechatronics Certificate Program is the result of a partnership between PMMI, the Mid-Atlantic Mechatronics Advisory Council, and collaborating community and technical colleges. The Mechatronics Certificate Program is aligned with the skill standards that have been articulated by PMMI and schools that focus their curriculum on these skill standards. It is the intent of the IMTC to work with and develop education partners and aligns apprenticeship initiatives with career and technology centers and community and technical colleges to deliver world-class workforce training and education to partnering companies.



Mechatronics is an integrated systems approach to the maintenance, troubleshooting, repair, and design modifications of mechanical, electrical, computer and control systems that includes automation, process controls, motion controls, and robotics used throughout world-class manufacturing.

In a world-class manufacturing environment, technicians must move beyond the conventional single-discipline silos to a multi-skilled work environment. At the entry level, this could be referred to by the term electro-mechanical technology, which evolves into mechatronics, as skills become more complex and more highly integrated.

Manufacturing is complicated, ranging from metal cutting and forming to chemical processing and petroleum refining. Manufactured products include automobiles, food, beverages, electronics, cosmetics, pharmaceuticals, fertilizers, paints, cements and a host of other products which require vastly differing manufacturing processes. While the core skills and technologies for manufacturing are similar across all sectors, as skill levels increase, the technologies diverge. The skill standards promoted by PMMI, around which this apprenticeship program has been developed, will be most appropriate for hybrid manufacturers such as those producing foods, beverages, pharmaceuticals, consumer goods, and other products that move through batch or continuous processing, and then on to some sort of aggregation or packaging process. While the first year of the program may be appropriate across most manufacturing environments, the skills covered in the ensuing years will not include those skills needed in manufacturing industries such as precision CNC machining or advanced continuous process industries.

DEFINITIONS

APPRENTICE: Any individual employed by the employer meeting the qualifications described in the Standards of Apprenticeship who has signed an Apprenticeship Agreement with the local Sponsor providing for training and related instruction under these Standards, and who is registered with the Registration Agency.

APPRENTICE ELECTRONIC REGISTRATION (AER): Is an electronic tool that allows for instantaneous transmission of apprentice data for more efficient registration of apprentices and provides Program Sponsors with a faster turnaround on their submissions and access to their apprenticeship program data.

APPRENTICESHIP AGREEMENT: The written agreement between the apprentice and the Sponsor setting forth the responsibilities and obligations of all parties to the Apprenticeship Agreement with respect to the Apprentice's employment and training under these Standards. Each Apprenticeship Agreement must be registered with the Registration Agency.

APPRENTICESHIP COMMITTEE: Apprenticeship Committee means those persons designated by the sponsor to act as an agent for the sponsor in the development and administration of the program. The Apprenticeship Committee is also the connection to the Industrial Maintenance Training Center (IMTC) in order to maintain the Industry Partner relationship, identify training needs, assist in aligning programs to industry's needs and industry recognized credentials, and advance the Industrial Maintenance and Mechatronics Apprenticeship System.

CAREER LATTICE: Career lattice apprenticeship programs include occupational pathways that move an apprentice laterally or upward within an industry. PMMI's Mechatronics Certificate program tests for the core technical skills and real-world application needed in today's manufacturing environment. Through a series of assessments that are based on industry-developed competencies, the Mechatronics Certificate program helps an apprentice advance through the career lattice.

CERTIFICATE OF COMPLETION OF APPRENTICESHIP: The Certificate of Completion of Apprenticeship issued by the Registration Agency to those registered apprentices certified and documented as successfully completing the apprentice training requirements outlined in these Standards of Apprenticeship.

COMPETENCY-BASED OCCUPATION: The competency-based approach measures skill acquisition through the individual apprentice's successful demonstration of acquired skills and knowledge, as verified by the program sponsor.

ELECTRONIC MEDIA: Media that utilize electronics or electromechanical energy for the end user (audience) to access the content; and includes, but is not limited to, electronic storage media, transmission media, the Internet, extranet, lease lines, dial-up lines, private networks, and the physical movement of removable/transportable electronic media and/or interactive distance learning.

EMPLOYER: Means any person or organization employing an apprentice whether or not such person or organization is a party to an Apprenticeship Agreement with the apprentice.

INTERIM CREDENTIAL: Interim Credential means a credential issued by PMMI as Certificates of competency attainment by an apprentice. Competency means the attainment of core technical skills and knowledge as specified by an occupational standard. Program sponsors shall identify all required PMMI Interim Credentials in their Program Standards. Interim credentials can only be issued for recognized components of an apprenticeable occupation as identified by an appropriate job task analysis. PMMI's Mechatronics Certificate program tests for the core technical skills and knowledge through a series of assessments that are based on industry-developed competencies.

JOURNEYWORKER: A worker who has attained a level of skill, abilities and competencies recognized within an industry as having mastered the skills and competencies required for the occupation. (Use of the term may also refer to a mentor, technician, specialist or other skilled worker who has documented sufficient skills and knowledge of an occupation, either through formal apprenticeship or through practical on-the-job experience and formal training.)

O*NET-SOC CODE: The Occupational Information Network (O*NET) codes and titles are based on the new Standard Occupational Classification (SOC) system mandated by the federal Office of Management and Budget for use in collecting statistical information on occupations. The O*NET classification uses an 8 digit O*NET SOC Code. Use of the SOC classification as a basis for the O*NET codes ensures that O*NET information can be readily linked to labor market information such as occupational employment and wage data at the national, State, and local levels.

ON - THE - JOB LEARNING (OJL): Tasks learned on-the-job in which the apprentice must become proficient before a completion certificate is awarded. The learning must be through structured, supervised work experience.

PROGRAM SPONSOR: The Sponsor in whose name the Standards of Apprenticeship will be registered, and which will have the full responsibility for administration and operation of the apprenticeship program.

PROVISIONAL REGISTRATION: Means the 1-year initial provisional approval of newly registered programs that meet the required standards for program registration, after which program approval may be made permanent, continued as provisional, or rescinded following a review by the Registration Agency, as provided for in the criteria describe in §29.3 (g) and (h).

REGISTERED APPRENTICESHIP PARTNERS INFORMATION DATA SYSTEM (RAPIDS): The Federal system which provides for the automated collection, retention, updating, retrieval and summarization of information related to apprentices and apprenticeship programs.

REGISTRATION AGENCY: Means the U.S. Department of Labor, Office of Apprenticeship or a recognized State Apprenticeship Agency that has responsibility for registering apprenticeship programs and apprentices; providing technical assistance; conducting reviews for compliance with Title 29, CFR parts 29 and 30 and quality assurance assessments.

RELATED INSTRUCTION: An organized and systematic form of instruction designed to provide the apprentice with the knowledge of the theoretical and technical subjects related to the apprentice's occupation. Such instruction may be given in a classroom, through occupational or industrial courses, or by correspondence courses of equivalent value, electronic media, or other forms of self-study approved by the Registration Agency.

STANDARDS OF APPRENTICESHIP: This entire document including all appendices and attachments hereto, and any future modifications or additions approved by the Registration Agency.

SUPERVISOR OF APPRENTICE(S): An individual designated by the program sponsor to supervise or have charge and direction of an apprentice.

TRANSFER: A shift of apprenticeship agreement from one program to another or from one employer within a program to another employer within that same program, where there is agreement between the apprentice and the affected apprenticeship committee or program sponsor.

SECTION I – PROGRAM ADMINISTRATION

GOVERNANCE

Overall, the Industrial Maintenance Training Center (IMTC) supports a national system of regionally-based coalitions (Industry Partnerships) of local manufacturing companies dedicated to preparing Mechatronics Technicians for careers in world-class manufacturing in collaboration with PMMI and the Mid-Atlantic Mechatronics Advisory Council (MAMAC).

Within this structure, the IMTC provides the following:

- A constant process for reviewing the Standards of Apprenticeship to assure that they meet the needs of manufacturers broadly;
- Information that regional partners, local manufacturing companies, and representatives from the state and federal government need to put Mechatronics Technician apprenticeship programs together;
- Consultation where needed with schools and manufacturers to assure that the training proposed meets the Standards of Apprenticeship;
- Consultation with project managers of Industry Partnerships (IP's) and with Chairpersons of Apprenticeship Committees on apprenticeship implementation as needed;
- Liaison with PMMI regarding the use of PMMI credentials in the apprenticeship process; and
- Collection and aggregation of data nationally to measure participation and impact of the regional programs.

Primarily, IMTC is an oversight and consultative body which facilitates higher-level linkages of IP's to the other national entities that are stakeholders in the Industrial Maintenance and Mechatronics Apprenticeship System.

Operationally, local IP's in Industrial Maintenance and Mechatronics focus on apprenticeship programs that cut across all industry sectors within manufacturing in a certain region.

They are responsible for sustaining partner relationships, identifying training needs, assisting in aligning apprenticeship programs to industry's needs and industry recognized credentials, and advancing the Industrial Maintenance and Mechatronics Apprenticeship System.

The IP's are composed of representatives of partnering companies that registered apprenticeship programs as part of the Industrial Maintenance and Mechatronics Apprenticeship System. The regions that they serve may be very large or very small depending on the concentration of programs in the geographical area.

ROLE OF THE INDUSTRY PARTNERSHIPS (IP's)

The role of the IP's includes the following:

- Bring employers together to identify and address their training needs.
- Assist educational institutions in aligning their programs to industry demand.
- Develop industry-recognized credentials.
- Assist employers with the implementation of their Mechatronics Apprenticeship Programs and the use of the PMMI Competency Check List.
- Assist employers and educational institutions with the alignment of on-the-job learning and related technical instruction with PMMI Core Certificates and the implementation of PMMI Core Certificate Assessments.
- Promote employer collaboration in the development of apprenticeship programs that prepare Mechatronics Technicians for careers in world-class manufacturing.
- Undertake programs to build pipelines of new employees and reach out to underserved populations.
- Influence private, public and educational institutions to work together to develop long-term solutions to workforce challenges.
- Establish effective governance, engage members, seek new members and develop plans to sustain success.
- Seek continuous improvement and measure results.

PARTNERING COMPANY APPRENTICESHIP COMMITTEE

At their discretion, Program Sponsors may establish an Apprenticeship Committee to carry out the responsibilities and duties required of a Program Sponsor as described in these Standards of Apprenticeship. If an Apprenticeship Committee is established by the Program Sponsor, a list of the membership and the areas of expertise they represent must be provided to the Registration Agency.

If the Program Sponsor is a member of an Industry Partnership, the Program Sponsor will provide a liaison to the regional Industry Partnership and to the IMTC. Employer collaboration will be essential to sustain quality apprenticeship programs and to develop

long-term solutions to workforce challenges. The Industry Partnership communication network should include the Registration Agency.

While the Office of Apprenticeship recommends that Program Sponsors utilize the services of an Apprenticeship Committee, a sponsor may also elect to administer the program without the services of an Apprenticeship Committee.

STRUCTURE OF THE APPRENTICESHIP COMMITTEE

If a Program Sponsor chooses to use an Apprenticeship Committee, the Apprenticeship Committee will be composed of employees appointed by the Company Management Team and will serve until replaced.

An Apprenticeship Committee may be either joint or non joint as follows:

- 1) A joint committee is composed of an equal number of representatives of the Program Sponsor and of the employees represented by a bona fide collective bargaining agent(s).
- 2) A non-joint committee, which may also be known as a unilateral committee, has Program Sponsor representatives, but does not have a bona fide collective bargaining agent as a participant. A non-joint committee may include workers or non-supervisors.

New member appointments are recommended to the Company Management Team by existing Apprenticeship Committee members. The Apprenticeship Committee will consist of a Chairperson selected by the Committee and recommended to the Company Management Team for approval; management representatives; an Apprentice Training Supervisor or Administrator who will serve as permanent secretary/recorder for the Apprenticeship Committee; and non-supervisors with a journeyworker background that are Mechatronics Technician subject matter experts and are preferably graduate apprentices.

Technical Assistance from the U.S. Department of Labor, Office of Apprenticeship; State Apprenticeship Agencies; partnering Workforce Investment Boards; industry associations; community and technical colleges; and career and technology centers, may be requested to advise the Apprenticeship Committee.

ADMINISTRATIVE PROCEDURES

- A. The Apprenticeship Committee Chairperson will be selected by the Apprenticeship Committee and recommended to the Company Management Team for approval.
- B. The Apprenticeship Committee will determine the time and place of regular meetings which will take place at least every (to be determined) month(s) and present the meeting schedule to the Company Management Team for approval.

- C. The Apprenticeship Committee will have the power to vote on all questions affecting apprenticeship and to then make recommendations to the Company Management Team for approval.

APPRENTICESHIP COMMITTEE RESPONSIBILITIES (EXAMPLE)

- A. Ensure that the company's Standards of Apprenticeship are registered with the appropriate Registration Agency.
- B. Cooperate in the selection of apprentices as outlined in this program.
- C. Determine the physical fitness of qualified applicants to perform the work of the occupation that may require a medical examination prior to their employment as apprentices.
- D. Advise apprentices on the need for accident prevention and provide instruction with respect to safety in the workplace.
- E. Ensure that all apprentices are under written Apprenticeship Agreements and the Apprenticeship Agreements are registered with the Registration Agency.
- F. Recommend to the Company Management Team proposals which will enhance the Mechatronics Technician Apprenticeship Program.
- G. Consider proposals presented by the Apprentice Training Administrator and/or Supervisor needing the Apprenticeship Committee's assistance and forward these proposals, with appropriate recommendations, to the Company Management Team for approval.
- H. Assist in the development of work processes and work schedules so as to coordinate training experiences and apprentice rotation between occupational areas to the best advantage of the apprentice and the company.
- I. Analyze related instruction requirements for the Mechatronics Technician occupation and ensure that the curriculum satisfies all training requirements.
- J. Assist the Apprentice Training Administrator in the development of apprentice progress records that verify the skills and knowledge achieved through on-the-job learning and related technical instruction assignments, the attainment of PMMI Core Certificates, and alignment with Mechatronics Technician job requirements.
- K. Meet at least every (to be determined) month(s) to review records and progress of each apprentice and recommend improvement or modification in training schedules, related technical instruction and other training activities. The Apprentice Training Administrator will serve as the secretary/recorder and written minutes of the meeting will be kept.

- L. Assist the Apprentice Training Administrator with the review and evaluation of Advance Credit requests presented by apprentices and make recommendations to the Company Management Team for approval.
- M. Assist the Apprentice Training Administrator in evaluating the progress of apprentices, and when unsatisfactory progress occurs, recommend termination of Apprenticeship Agreements to the Company Management Team for approval.
- N. Hear and resolve all complaints of violation of Apprenticeship Agreements.
- O. Assist the Apprentice Training Administrator in determining when an apprentice has satisfactorily completed all program requirements and demonstrated a level of competency and proficiency of a journeyworker Mechatronics Technician.
- P. Notify the appropriate Registration Agency of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, completions and cancellations with explanation of causes and notice of completions of Apprenticeship Agreements.
- Q. Supervise all the provisions of the company's Standards of Apprenticeship and be responsible, in general, for the successful operation of the Mechatronics Technician Apprenticeship Program.
- R. Exercise responsibility, in general, for advising on all matters that deal with the successful operation of the Mechatronics Technician Apprenticeship Program.
- S. Provide a liaison to the regional Industry Partnership, if one exists, or to appropriate IMTC Committees as elected or appointed.
- T. Provide apprentices with a copy of the written rules and policies and the apprentice will sign an acknowledgment receipt of same. This procedure will be followed whenever revisions or modifications are made to the rules and policies.

SECTION II - EQUAL OPPORTUNITY PLEDGE – Title 29 CFR 29.5(b)(21) and 30.3(b)

The recruitment, selection, employment, and training of apprentices during their apprenticeship, shall be without discrimination because of race, color, religion, national origin, or sex. The Sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under Title 29 of the Code of Federal Regulations (CFR), part 30, as amended (insert state regulations here, if applicable).

SECTION III - AFFIRMATIVE ACTION PLAN – Title 29 CFR 29.5(b)(21) and 30.4

If the Sponsor employs five or more apprentices, the Sponsor will adopt an Affirmative Action Plan and Selection Procedures as required under Title 29, CFR part 30. It will be attached as Appendix C.

SECTION IV- QUALIFICATIONS FOR APPRENTICESHIP – Title 29 CFR 29.5(b)(10)

Applicants will meet the following minimum qualifications

A. Age

The Sponsor will establish qualifications regarding minimum age limits. *(Applicant must provide evidence of minimum age respecting any applicable State Laws or regulations.)* Apprentices must not be less than 16 years of age. The minimum age limit for this position is eighteen (18). Applicants must reach eighteen (18) years of age by date of appointment.

B. Education

A high school diploma or GED equivalency is required. Applicant must provide an official transcript(s) for high school and post high school education and training. All GED records must be submitted if applicable.

Applicants must submit a DD-214 to verify military training and/or experience if they are a veteran and wish to receive consideration for such training/experience.

C. Physical

Applicants will be physically capable of performing the essential functions of the apprenticeship program, with or without a reasonable accommodation, and without posing a direct threat to the health and safety of the individual or others.

Applicants will [physical agility test, fitness test, or screen for the current illegal use of drugs (**select all, some, or none, if applicable**)] on acceptance into the program and prior to being employed.

D. Aptitude Test

All applicants must pass the Test of Adult Basic Education (TABE) at a minimum 10th grade level and WorkKeys at level three in Reading for Information, Locating Information, and Applied Mathematics. Programs may also require Applied Technology and Workplace Observation.

E. Community College Placement Test (Optional Example)

All apprenticeship applicants must obtain an acceptable score on the community college placement test for Reading, English, and Math in order to participate in related instruction courses offered at the community or technical college and required as part of the Related Instruction Program.

SECTION V - SELECTION OF APPRENTICES – Title 29 CFR 30.5

Selection into the apprenticeship program will be in accordance with the selection procedures made a part of these Standards (Appendix D).

SECTION VI - APPRENTICESHIP AGREEMENT – Title 29 CFR 29.3(d) and (e) and 29.5(b)(11)

After an applicant for apprenticeship has been selected, but before employment as an apprentice or enrollment in related instruction, the apprentice will be covered by a written Apprenticeship Agreement (Appendix B) signed by the Sponsor and the apprentice and approved by and registered with the Registration Agency. Such agreement will contain a statement making the terms and conditions of these standards a part of the agreement as though expressly written therein. A copy of each Apprenticeship Agreement will be furnished to the apprentice, the Sponsor, the Registration Agency, and the employer. An additional copy will be provided to the Veteran's State Approving Agency for those veteran apprentices desiring access to any benefits to which they are entitled.

Prior to signing the Apprenticeship Agreement, each selected applicant will be given an opportunity to read and review these Standards, the Sponsor's written rules and policies and the Apprenticeship Agreement.

The Registration Agency will be advised within forty-five (45) days of the execution of each Apprenticeship Agreement and will be given all the information required for registering the apprentice.

SECTION VII - RATIO OF APPRENTICES TO JOURNEYWORKERS – Title 29 CFR 29.5(b)(7)

A numeric ratio of apprentices to journeyworkers consistent with proper supervision, training, safety, and continuity of employment throughout the apprenticeship, the ratio of apprentices to journeyworkers will be one (1) apprentice to one (1) journeyworker. The ratio language must be specific and clearly described as to its application on the job site, workforce, department or plant.

In a manufacturing environment where it is intended to move from a conventional to a multi-skilled workforce, there may not be journeyworkers in the multi-skilled Mechatronics Technician occupation. Existing journeyworkers may be in conventional, single craft occupations. In this case, these journeyworkers may be substituted for journeyworkers in the multi-skilled Mechatronics Technician occupation.

SECTION VIII - TERM OF APPRENTICESHIP – Title 29 CFR 29.5(b)(2)

Since these Standards of Apprenticeship are being implemented as a competency-based apprenticeship program, the program is not constrained by time. The term of apprenticeship will provide sufficient on-the-job learning and related instruction to enable the apprentice to attain the required competencies and PMMI Certificates as stated in the Work Process Schedule and Related Instruction Outline (Appendix A). To complete the apprenticeship program, the apprentice must satisfactorily fulfill all on-the-job learning and related instruction requirements, attain the required competencies, and meet all required PMMI Certificates Criteria. Full credit will be given for the probationary period.

The sponsor will determine when the apprentice satisfactorily completes program requirements and will request a *Certificate of Completion of Apprenticeship* when the apprentice demonstrates a level of competency and proficiency equivalent to a journeyworker level Mechatronics Technician.

SECTION IX - PROBATIONARY PERIOD – Title 29 CFR 29.5(b)(8), (b)(20)

All applicants selected for apprenticeship will serve a probationary period of not less than twelve (12) months of on-the-job learning.

During the probationary period either the apprentice or the Sponsor may terminate the Apprenticeship Agreement, without stated cause, by notifying the other party in writing.

The records for each probationary apprentice will be reviewed prior to the end of the probationary period. Records may consist of periodic reports regarding progression made in both on-the-job learning and related instruction, and any disciplinary action taken during the probationary period.

Any probationary apprentice evaluated as satisfactory after a review of the probationary period will be given full credit for the probationary period and continue in the program. After the probationary period the Apprenticeship Agreement may be canceled at the request of the apprentice, or may be suspended or canceled by the Sponsor for reasonable cause after documented due notice to the apprentice and a reasonable opportunity for corrective action. In such cases, the Sponsor will provide written notice to the apprentice and to the Registration Agency of the final action taken.

SECTION X - HOURS OF WORK

Apprentices will generally work the same hours as journeymen, except that no apprentice will be allowed to work overtime if it interferes with attendance in related instruction classes.

Apprentices who do not satisfactorily complete the on-the-job learning and related instruction requirements, attain the required *competencies* and meet all required *PMMI Certificates Criteria* during a given segment will have the term of that segment extended until all requirements are met.

SECTION XI - APPRENTICE WAGE PROGRESSION – Title 29 CFR 29.5(b)(5)

Apprentices will be paid a progressively increasing schedule of wages during their apprenticeship based on the acquisition of increased skill and competence on-the-job and in related instruction. Before an apprentice is advanced to the next segment of training or to journeyworker status, the Sponsor will evaluate all progress to determine whether advancement has been earned by satisfactory performance in their on-the-job learning and in related instruction courses. In determining whether satisfactory progress has been made, the Sponsor will be guided by the work experience and related instruction records and reports.

The progressive wage schedule will be an increasing percentage of the journeyworker wage rate. The percentages that will be applied to the applicable journeyworker rate are shown on the attached Apprentice Salary Schedule (Appendix A). In no case will the starting wages of apprentices be less than that required by any minimum wage law which may be applicable.

SECTION XII - CREDIT FOR PREVIOUS EXPERIENCE – Title 29 CFR 29.5(b)(12) and 30.4(c)(8)

The Sponsor may grant credit towards the term of apprenticeship to new apprentices who demonstrate previous acquisition of skills or knowledge equivalent to that which would be received under these Standards.

Apprentice applicants seeking credit for previous experience gained outside the supervision of the Sponsor must submit the request at the time of application and furnish such records, affidavits, and other documentation to substantiate the claim. Applicants requesting such credit who are selected into the apprenticeship program will start at the beginning wage rate. The request for credit will be evaluated and a determination made by the Sponsor during the probationary period when actual on-the-job and related instruction performance can be examined. Prior to completion of the probationary period, the amount of credit to be awarded will be determined after review of the apprentice's previous work and training/education record and evaluation of the

apprentice's performance and demonstrated skill and knowledge during the probationary period.

This is a competency-based apprenticeship program and the apprentice must satisfactorily fulfill all on-the-job learning and related instruction requirements, attain the required competencies as defined in Appendix A and meet all required PMMI Certificates Criteria. The sponsor will determine when the apprentice satisfactorily completes program requirements and will also determine when the apprentice demonstrates a level of competency and proficiency equivalent to a journeyworker level Mechatronics Technician.

An apprentice granted credit will be advanced to the wage rate designated for the period to which such credit accrues. The Registration Agency will be advised of any credit granted and the wage rate to which the apprentice is advanced. The granting of advanced standing will be uniformly applied to all apprentices.

SECTION XIII - WORK EXPERIENCE – Title 29 CFR 29.5(b)(3) and 30.8

During the apprenticeship the apprentice will receive such on-the-job learning and related instruction in all phases of the occupation necessary to develop the skill and proficiency of a skilled journeyworker. The on-the-job learning will be under the direction and guidance of the supervisor of the apprentice(s).

SECTION XIV - RELATED INSTRUCTION – Title 29 CFR 29.5(b)(4)

During each segment of training each apprentice is required to participate in coursework related to the job as outlined in Appendix A. For the Mechatronics Technician occupation, the recommended term of apprenticeship will include no less than 144 hours of related instruction for each year of the apprenticeship. Apprentices agree to take such courses as the Sponsor deems advisable. The Sponsor will secure the instructional aids and equipment it deems necessary to provide quality instruction. In cities, towns or areas having no community or technical college, or a career and technology center, or other schools that can furnish related instruction; the apprentice may be required to take an alternate form of instruction that meets the approval of the Sponsor and the Registration Agency.

Apprentices (sponsor Inserts "will" or "will not") be paid for hours spent attending related instruction classes.

If applicable, the Sponsor will inform each apprentice of the availability of community or technical college credit through the **(Insert the Names of Educational Institutions Which Will Offer College Credit)**.

Any apprentice who is absent from related instruction classes, unless officially excused, will satisfactorily complete all course work missed before being advanced to the next period of training. In cases of failure of an apprentice to fulfill the obligations regarding related instruction (or on-the-job learning) without due cause, the Sponsor will take appropriate disciplinary action and may terminate the Apprenticeship Agreement after due notice to the apprentice and opportunity for corrective action.

To the extent possible, related instruction will be closely correlated with the practical experience and training received on-the-job. The Sponsor will monitor and document the apprentice's progress in related instruction classes.

The Sponsor will secure competent instructors whose knowledge, experience, and ability to teach will be carefully examined and monitored. If applicable, when possible, the Sponsor may require the instructors to attend the **(Insert the Names of Institutions That Will Provide Training)**.

SECTION XV - SAFETY AND HEALTH TRAINING – Title 29 CFR 29.5(b)(9)

All apprentices will receive instruction in safe and healthful work practices both on-the-job and in related instruction that are in compliance with the Occupational Safety and Health Standards promulgated by the Secretary of Labor under 29 U.S.C. 651 et seq., as amended, dated December 29, 1970, and subsequent amendments to that law, or State Standards that have been found to be at least as effective as the Federal Standards

Apprentices will be taught that accident prevention is very largely a matter of education, vigilance, and cooperation and that they should strive at all times to conduct themselves in their work to ensure their own safety and that of their fellow workers.

SECTION XVI - SUPERVISION OF APPRENTICES – Title 29 CFR 29.5(b)(14)

The Sponsor will be responsible for the training of the apprentice on the job. Apprentices will be under the general supervision of the Sponsor and under the direct supervision of the journeyworker to whom they are assigned. The supervisor of apprentice(s) designated by the employer will be responsible for the apprentice's work assignments, and will ensure the apprentice is working under the supervision of a skilled journeyworker, evaluation of work performance, and completion and submittal of progress reports to the Sponsor.

No apprentice will be allowed to work without direct journeyworker supervision.

SECTION XVII - RECORDS AND EXAMINATIONS – Title 29 CFR 29.5(b)(6)

Each apprentice may be responsible for maintaining a record of his/her work experience/training on-the-job and in related instruction and for having this record verified by his/her supervisor at the end of each week. The apprentice will authorize an effective release of their completed related instruction records from the local school authorities to the Sponsor. The records and all data, written records of progress evaluations, corrective and final actions pertaining to the apprenticeship, will be maintained by and will be the property of the Sponsor. This record will be included in each apprentice's record file maintained by the Sponsor.

Before each period of advancement, or at any other time when conditions warrant, the Sponsor will evaluate the apprentice's record to determine whether he/she has made satisfactory progress. If an apprentice's related instruction or on-the-job progress is found to be unsatisfactory, the Sponsor may determine whether the apprentice will continue in a probationary status, or require the apprentice to repeat a process or series of processes before advancing to the next wage classification. In such cases, the Sponsor will initiate a performance improvement plan with the apprentice.

Should it be found that the apprentice does not have the ability or desire to continue the training to become a journeyworker, the Sponsor will, after the apprentice has been given adequate assistance and opportunity for corrective action, terminate the Apprenticeship Agreement.

SECTION XVIII - MAINTENANCE OF RECORDS – Title 29 CFR 29.5(b)(23) and 30.8

The Sponsor will maintain for a period of five (5) years from the date of last action, all records relating to apprentice applications (whether selected or not), the employment and training of apprentices, and any other information relevant to the operation of the program. This includes, but is not limited to, records on the recruitment, application and selection of apprentices, and records on the apprentice's job assignments, promotions, demotions, layoffs, terminations, rate of pay, or other forms of compensation, hours of work and training, evaluations, and other relevant data. The records will permit identification of minority and female (minority and non-minority) participants. These records will be made available on request to the Registration Agency.

SECTION XIX. - CERTIFICATE OF COMPLETION OF APPRENTICESHIP – Title 29 CFR 29.5(b)(15)

Upon satisfactory completion of the requirements of the apprenticeship program as established in these Standards, the Sponsor will so certify in writing to the Registration Agency and request that a Certificate of Completion of Apprenticeship be awarded to the completing apprentice(s). Such requests will be accompanied by the appropriate documentation for both the on-the-job learning and the related instruction as may be required by the Registration Agency.

MECHATRONICS TECHNICIAN CAREER LATTICE: The Mechatronics Technician Career Lattice Apprenticeship Program includes occupational pathways that move an apprentice laterally or upward within an industry. PMMI's Mechatronics Certificate program tests for the core technical skills and real-world application needed in today's manufacturing environment. Through a series of assessments that are based on industry-developed competencies, the Mechatronics Certificate program helps an apprentice advance through the career lattice.

INTERIM CREDENTIAL: PMMI Core Certificates are issued as Interim Credentials to certify competency attainment by an apprentice. Competency means the attainment of core technical skills and knowledge as specified by an occupational standard. Program sponsors shall identify all required PMMI Interim Credentials in their Program Standards. Interim credentials can only be issued for recognized components of an apprenticeable occupation as identified by an appropriate job task analysis. PMMI's Mechatronics Certificate program tests for the core technical skills and knowledge through a series of assessments that are based on industry-developed competencies.

SECTION XX - NOTICE TO REGISTRATION AGENCY – Title 29 CFR 29.3(2)(d) and (e) and 29.5(b)(19)

The Registration Agency will be notified within forty-five (45) of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, modifications, completions, cancellations, and terminations of Apprenticeship Agreements and causes.

SECTION XXI - CANCELLATION AND DEREGISTRATION – Title 29 CFR 29.5(b)(18)

These Standards will, upon adoption by the Sponsor be submitted to the Registration Agency for approval. Such approval will be acquired before implementation of the program.

(Insert Name of Local Sponsor) reserves the right to discontinue at any time the apprenticeship program set forth herein. The Registration Agency will be notified promptly in writing of any decision to cancel the program.

Deregistration of these Standards may be initiated by the Registration Agency for failure of the Sponsor to abide by the provisions herein. Such deregistration will be in accordance with the Registration Agency's regulations and procedures.

Within fifteen (15) days of cancellation of the apprenticeship program (whether voluntary or involuntary), the Sponsor will notify each apprentice of the cancellation and the effect of same. This notification will conform to the requirements of Title 29, CFR part 29.8.

SECTION XXII - AMENDMENTS OR MODIFICATIONS – Title 29 CFR 29.5(b)(18)

These Standards may be amended or modified at any time by the Sponsor provided that no amendment or modification adopted will alter any Apprenticeship Agreement in force at the time without the consent of all parties. Such amendment or modification will be submitted to the Registration Agency for approval and registration prior to being placed in effect. A copy of each amendment or modification adopted will be furnished to each apprentice to whom the amendment or modification applies.

SECTION XXIII - ADJUSTING DIFFERENCES/COMPLAINT PROCEDURE – Title 29 CFR 29.5(b)(22), 29.7(k) and 30.11

The Sponsor will have full authority to supervise the enforcement of these Standards. Its decision will be final and binding on the employer, the sponsor, and the apprentice, unless otherwise noted below.

If an applicant or an apprentice believes an issue exists that adversely affects his/her participation in the apprenticeship program or violates the provisions of the Apprenticeship Agreement or Standards, relief may be sought through one or more of the following avenues, based on the nature of the issue:

Title 29 CFR 29.7(k)

The Sponsor will hear and resolve all complaints of violations concerning the Apprenticeship Agreement and the registered Apprenticeship Standards, for which written notification is received within fifteen (15) days of violations. The Sponsor will make such rulings as it deems necessary in each individual case and within thirty (30) days of receiving the written notification. Either party to the Apprenticeship Agreement may consult with the Registration Agency for an interpretation of any provision of these Standards over which differences occur. The name and address of the appropriate authority to receive, process and make disposition of complaints is: **(Sponsor should insert applicable information here)**

Title 29 CFR 30.11

Any apprentice or applicant for apprenticeship who believes that he/she has been discriminated against on the basis of race, color, religion, national origin, or sex, with regard to apprenticeship or that the equal opportunity standards with respect to his/her selection have not been followed in the operation of an apprenticeship program, may personally or through an authorized representative, file a complaint with the Registration Agency or, at the apprentice or applicant's election, with the private review body established by the Program Sponsor (if applicable).

The complaint will be in writing and will be signed by the complainant. It must include the name, address, and telephone number of the person allegedly

discriminated against, the Program Sponsor involved, and a brief description of the circumstances of the failure to apply equal opportunity standards.

The complaint must be filed not later than one hundred eighty (180) days from the date of the alleged discrimination or specified failure to follow the equal opportunity standards, and in the case of complaints filed directly with the review body designated by the Program Sponsor to review such complaints, any referral of such complaint by the complainant to the Registration Agency must occur within the time limitation stated above or thirty (30) days from the final decision of such review body, whichever is later. The time may be extended by the Registration Agency for good cause shown.

Complaints of discrimination in the apprenticeship program may be filed and processed under Title 29, CFR part 30, and the procedures as set forth above.

The Sponsor will provide written notice of its complaint procedure to all applicants for apprenticeship and all apprentices.

SECTION XXIV - TRANSFER OF AN APPRENTICE AND TRAINING OBLIGATION – Title 29 CFR 29.5(13)

The transfer of an apprentice between apprenticeship programs and within an apprenticeship program must be based on agreement between the apprentice and the affected apprenticeship committee or program sponsors, and must comply with the following requirements:

- a. The transferring apprentice must be provided a transcript of related instruction and on-the-job learning by the committee or program sponsor;
- b. Transfer must be to the same occupation; and
- c. A new apprenticeship agreement must be executed when the transfer occurs between the program sponsors.

If the Sponsor is unable to fulfill his/her training obligation due to lack of work or failure to conform to these Standards the Sponsor will make every effort to refer the apprentice with his/her consent to another employer, Registration Agency or One Stop for placement into another registered apprenticeship program. This will provide the apprentice an opportunity for continuous employment and completion of their apprenticeship program. The Sponsor will also make available to the apprentice and the receiving employer the apprentice's training record. The apprentice must receive credit from the new employer for the training already satisfactorily completed.

SECTION XXV - RESPONSIBILITIES OF THE APPRENTICE

Apprentices, having read these Standards formulated by the Sponsor and signed an Apprenticeship Agreement with the Sponsor agree to all the terms and conditions contained therein and agree to abide by the Sponsor's rules and policies, including any amendments, serve such time, perform such manual training, and study such subjects as the Sponsor may deem necessary to become a skilled Mechatronics Technician.

In signing the Apprenticeship Agreement, apprentices assume the following responsibilities and obligations under the apprenticeship program:

- A. Perform diligently and faithfully the work of the occupation and other pertinent duties assigned by the Sponsor and the employer in accordance with the provisions of these Standards.
- B. Respect the property of the employer and abide by the working rules and regulations of the employer.
- C. Attend and satisfactorily complete the required hours in the on-the-job learning and in related instruction in subjects related to the occupation as provided under these Standards.
- D. Maintain and make available such records of work experience and training received on-the-job and in related instruction as may be required by the Sponsor.
- E. Develop and practice safe working habits and work in such a manner as to assure his/her personal safety and that of other fellow workers.
- F. Work for the employer to whom the apprentice is assigned for the completion of apprenticeship, unless reassigned to another employer or the Apprenticeship Agreement is terminated by the Sponsor.
- G. The apprentice will be provided with a copy of the written rules and policies and will sign an acknowledgment receipt of same. This procedure will be followed whenever revisions or modifications are made to the rules and policies.

SECTION XXVI - TECHNICAL ASSISTANCE

Technical Assistance from the U.S. Department of Labor, Office of Apprenticeship; State Apprenticeship Agencies; partnering Workforce Investment Boards; industry associations; community and technical colleges; and career and technology centers, may be requested to advise the Apprenticeship Committee.

The Sponsor is encouraged to invite representatives from industry, education, business, private and/or public agencies to provide consultation and advice for the successful operation of this Mechatronics Technician Apprenticeship Program.

SECTION XXVII - OFFICIAL ADOPTION OF APPRENTICESHIP STANDARDS

The (Insert Employers Names or Employer Group Name or Association) hereby adopts these Standards of Apprenticeship on this ____ day of (Insert Month/Year).

SIGNATURE

SIGNATURE
