



OEM & Industry Seminars

Education and Training Provider
Request for Proposals



Education and Training Provider Request for Proposals

Authorized agency contact

The authorized agency contact person for all matters concerning this request for proposal is:

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This document is an education and training provider Request for Proposals (RFP) for the Michigan Alliance for Greater Mobility Advancement (MAGMA). Michigan's automotive industry is quickly developing technologies around connected and autonomous vehicles, cyber security, embedded software systems and other emerging technologies. In 2016 and 2017, MAGMA surveyed automotive industry OEMs, Tier 1, and Tier 2 suppliers to determine their top skill and training needs, and, through an RFP process, developed a short course catalog to provide opportunities for re-skilling mobility workers in six key focus areas. This is an RFP seeking to update that short course catalog.

The Workforce Intelligence Network for Southeast Michigan (WIN) has facilitated MAGMA since 2013.

All responses should be organized as indicated by the RFP. One, or several, education or training providers could be chosen for services based on the quality of responses to this RFP. If none of the responses fit the needs of MAGMA, no education or training provider will be chosen for services and MAGMA will issue another RFP at a later date.



Education and Training Provider Request for Proposals

Timetable

A. Release date: October 15, 2019

B. Deadline for submitting questions: October 22, 2019

1. Method for submitting questions: Email questions to michelle.wein@winintelligence.org by 5 PM EST on October 22, 2019 with the subject line: "Questions Submission: MAGMA Short Courses RFP"
 - a. Questions regarding this RFP will not be answered on an individual basis. All answers to questions received by the date specified above will be posted on www.miautomobility.org under the "RFP" section by 5 p.m. October 25, 2019.
 - b. Phone calls related to this RFP will not be accepted or addressed. Questions must be submitted via email as described above.

C. RFP due date and location:

Date: November 15, 2019
Time: Close of business (5:00 PM) Eastern Standard Time
Delivery method: E-mail responses to michelle.wein@winintelligence.org
Please specify "MAGMA RFP Response" in the subject line.

Responses that are not received via e-mail by the due date and time will be considered late and may be excluded from the review process. MAGMA and the Workforce Intelligence Network (WIN) are not responsible for any technical issues that may occur. **Please use the template in Appendix I to complete submission. Submissions over ten pages per course (not including cover page) will not be accepted.**

D. Anticipated duration of service:

Should an education and training provider(s) be chosen for a contract with MAGMA, MAGMA expects to execute provider contract(s) for inclusion in the course catalog within 60 days of acceptance. The contract term will last for two years with the option to extend for a third year should MAGMA find that the services fulfill their member needs. Within this timeframe, courses will be executed as requested by MAGMA



Education and Training Provider Request for Proposals members, and MAGMA will work with providers to develop and execute contracts for those courses.

E. Payment

Upon selection of course from updated short course catalog, MAGMA and project partners will select a vendor(s) and set contract terms and a payment schedule. The payment schedule for training providers will be negotiated on a mutually agreeable timeline, with an expectation of at least 25% of the course payment due at the beginning of the course, and the remaining 75% due after successful completion.



Education and Training Provider Request for Proposals

Background

In 2009, Michigan was moving swiftly toward renewable energy and other sustainable technologies. As a result, a consortium of industry, government, and education formed the Michigan Academy for Green Mobility Alliance (MAGMA). MAGMA was able to lead the effort of endorsing courses based on their ability to address employer-defined skills critical to green mobility jobs. MAGMA managed over \$4.3 million to support training in advanced energy storage, hybrid electric battery engineering, and vehicle electrification. MAGMA-endorsed or supported courses trained over 800 individuals from 2009-2012.

Michigan's automotive industry is quickly developing technologies around connected and autonomous vehicles, cyber security, embedded software systems and other emerging technologies. In response to the rapid growth in these areas, and the need for new and incumbent worker training, MAGMA updated its name to the Michigan Alliance for Greater Mobility Advancement to better reflect its role in the ecosystem. In 2016 and 2017, MAGMA surveyed automotive industry OEMs, Tier 1, and Tier 2 suppliers to determine their top skill and training needs. Driven by the needs of employers, MAGMA is administered by a Governing Board made up of industry, education providers, the workforce development system, and state government. MAGMA industry Board members include General Motors, Ford Motor Company, Fiat-Chrysler Automobiles, Toyota Motor North America, Nissan, Robert Bosch, BorgWarner, GKN Automotive, Roush and ZF.

It is the role of the Governing Board to make decisions on behalf of MAGMA. Automotive manufacturing companies, educational institutions, and the workforce development system work together through MAGMA to ensure the automotive industry has the engineering and technical talent needed to support connected, autonomous, hybrid, electric, lightweighting, alternative fuels, and other advanced vehicle technologies.

MAGMA drives the following objectives:

- Prepare individuals for emerging technologies in vehicle propulsion and vehicle component design, manufacturing, and maintenance through rapid/accelerated training and re-training.
- Target training to displaced and incumbent engineers, engineering students, displaced and incumbent technicians, and technician program students.
- When possible, seek and provide funding to help employers or individuals access training.



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MAGMA endorses education and training based on the occupations, skills, and knowledge required by employers to design, develop and manufacture the next generation vehicles. The focus is on efficiently and effectively up-skilling and training the Michigan workforce to prepare them for new jobs in advanced mobility. MAGMA endorsed education and training meets or exceeds employer-defined skill and competency needs, positioning individuals to excel.

Partnerships are critical to make the most efficient use of established curriculums, facilities, laboratories, and equipment to provide the automotive industry with the talent necessary to succeed. Collaboration is necessary to create the right mix of theoretical knowledge with practical experience and build on the strengths of individual organizations in order to provide the highest quality training available in these emerging fields.

Requirements

The following outlines the Education and Training Requirements for the RFP.

Applicants are encouraged to create innovative partnerships to make the most efficient use of established curriculum, resources, and expertise. Applications that combine coursework and lab experiences are preferred.

The purpose of this Education and Training Provider Request for Proposals is to develop and implement up to date and relevant short courses delivered by one or more provider(s) in the following areas:

1. Systems Engineering Concepts
2. Embedded Controls
3. Project & Program Management
4. Steel Bracket Design
5. Vehicle Performance
6. Soft Skills - Problem Solving & Financial Acumen

The program should consist of a list short of courses with a minimum of 4 hours, maximum of 24 hours, of classroom (lab as necessary) instruction time that provide students with the knowledge and practical experience necessary to work with the relevant technologies and/or topic areas. *Some areas below contain enough learning objectives for multiple short courses.* Training providers are encouraged to recommend a mix of



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courses that meet the learning objectives listed below, and to make recommendations on the type and number of courses offered under each subject area. The selected training provider(s) will work with MAGMA to carry out its mission and deliver world-class content to participants.

Responses for each of the trainings requested should include 1. A cover sheet with the name of the submitting institution and contact information for the person(s) submitting the proposal (name, title, phone, email) and 2. The following points of information, submitted via the template in Appendix I (not to exceed 10 pages per course).

- Course name
- Course length (days & hours)
- Time in class per day (hours)
- Time in lab (if applicable)
- Course delivery format: In-person and/or web-based delivery, campus, office, on-site, etc.
- Minimum class size
- Maximum class size
- Total course cost
- Course Description
- Lab projects description (if applicable) and number of lab projects
- Course learning objectives
- Course Content/Syllabus, including comments on training and delivery methodology
- Instructor qualifications



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Training Requested:

1. Systems Engineering Concepts

Target Audience:

- Incumbent workers and new employees
- Education and training for the Systems Engineering Concepts program should be structured for engineers, technicians and related technical and management staff

Learning Objectives and Outcomes:

- Systems Engineering Concepts should expose participants to a broad range of relevant content and case studies and should include a set of core coursework that provides the base knowledge necessary for working with technologies as well as opportunities to obtain more in-depth knowledge and experience in specific skill areas. Systems Engineering Concepts programming should include topics that cover all or a subset of the following key skill areas defined by employer needs:
 - Innovation & User Interface
 - System Bundling
 - End-user Design Methods
 - Intro to Systems
 - System Engineering Theory
 - Model Based Systems
 - Financial Acumen & Considerations
 - Analytics
 - Human Factors
 - Automotive Systems
 - Cyber Security
 - Quality & Root-cause Analysis

Training Requested:

2. Embedded Controls

Target Audience:

- Incumbent workers and new employees
- Education and training for the Embedded Controls program should be structured for engineers, technicians and related technical and management staff

Learning Objectives and Outcomes:

- Embedded Controls should expose participants to a broad range of relevant content and case studies and should include a set of core coursework that provides the base knowledge necessary for working with technologies as well as opportunities to obtain more in-depth knowledge and experience in specific skill areas. Embedded Controls programing should include topics that cover all or a subset of the following key skill areas defined by employer needs:
 - Interface
 - Performance
 - Safety
 - Networking
 - Sensors/Actuators
 - Software Design
 - Modeling/Analysis/Simulation
 - Problem Solving: System of Systems
 - System Bundling
 - End-user Design Methods
 - Cyber Security
 - Hardware/Software Interactions
 - Financial Acumen
 - Electrical/Software Control & Mechanical Integration



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Training Requested:

3. Program & Project Management

Target Audience:

- Incumbent workers and new employees
- Education and training for the Program & Project Management program should be structured for engineers, technicians and related technical and management staff

Learning Objectives and Outcomes:

- Program & Project Management should expose participants to a broad range of relevant content and case studies and should include a set of core coursework that provides the base knowledge necessary for working with technologies as well as opportunities to obtain more in-depth knowledge and experience in specific skill areas. Program & Project Management programming should include topics that cover all or a subset of the following key skill areas defined by employer needs:
 - Strategy
 - Conflict Resolution
 - Leadership: Influence, Facilitation, Empathy
 - Communication: Techniques, Active Listening
 - Tracking Techniques & Methodologies
 - Delegation & Planning
 - Problem Solving: Technology, Customer, Collaboration
 - Project Management for the non-Project Manager
 - Financial Acumen



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Training Requested:

4. Steel Bracket Design

Target Audience:

- Incumbent workers and new employees

Education and training for Steel Bracket Design program should be structured for engineers, technicians and related technical and management staff

Learning Objectives and Outcomes:

- Steel Bracket Design should expose participants to a broad range of relevant content and case studies and should include a set of core coursework that provides the base knowledge necessary for working with technologies as well as opportunities to obtain more in-depth knowledge and experience in specific skill areas. Steel Bracket Design programming should include topics that cover all or a subset of the following key skill areas defined by employer needs:

- Material selection
- Strength vs Stiffness
- Thickness selection
- Purpose of Flange and Beads
- Limitations of hole piercing vs surface angle
- Cam Piercing
- Common manufacturing requirements
 - Marking
 - RH/LH
 - 2WD/4WD
 - Front
 - Etc...
 - Anti-rotation Feature
 - Burr Direction
- Coating and Corrosion requirements
- Mass optimization by adding holes
- Weld nut/stud vs Burring hole
- Welding limitations (Total Thickness, # panels, panel thickness difference limit)
- Multiple Examples for Piece cost and Vendor tooling.



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Training Requested:

5. Vehicle Performance: Case Studies

Target Audience:

- Incumbent workers and new employees
- Education and training for the Vehicle Performance: Case Studies program should be structured for engineers, technicians and related technical and management staff

Learning Objectives and Outcomes:

- Vehicle Performance: Case Studies should expose participants to a broad range of relevant content and case studies and should include a set of core coursework that provides the base knowledge necessary for working with technologies as well as opportunities to obtain more in-depth knowledge and experience in specific skill areas. Vehicle Performance: Case Studies programing should include topics that cover all or a subset of the following key skill areas defined by employer needs:
 - Dynamics
 - Noise and Vibration
 - Electrical & Electronic Architecture
 - Optical Engineering Concepts



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Training Requested:

6. Soft Skills: Refresher for Supervisors, Engineers and Technicians

Target Audience:

- Incumbent workers and new employees
- Education and training for the Soft Skills: refresher for supervisors, engineers and technicians program should be structured for engineers, technicians and related technical and management staff

Learning Objectives and Outcomes:

- Soft Skills: refresher for supervisors, engineers and technicians should expose participants to a broad range of relevant content and case studies and should include a set of core coursework that provides the base knowledge necessary for working with technologies as well as opportunities to obtain more in-depth knowledge and experience in specific skill areas. Soft Skills: refresher for supervisors, engineers and technicians programing should include topics that cover all or a subset of the following key skill areas defined by employer needs:
 - Problem Solving
 - Financial Acumen
 - Customer Centered Problem Solving
 - Negotiation skills



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Proposal Components

MAGMA recognizes that a single education provider or a single program may not cover all topics. Proposals should indicate which skill areas are met by each of the courses included in the proposed list of short courses. Partnership with other institutions is encouraged to provide a comprehensive short course program.

Applicants are encouraged to be innovative in their program design and delivery to meet the employer-driven needs. Individual courses may focus on one or multiple skill areas and course design is at the discretion of the applicant.

Training Delivery:

- Method of Delivery:
 - Short course program delivery, not greater than 2 to 3 days in length,
 - Minimum classroom instruction time of 4 hours in total classroom instruction time per day
 - When lab time is appropriate, it is desirable to have at least 1 hour of lab time for every 4 hours of instruction
- Delivery Timeframe: regular business hours preferred, evenings and other times considered as necessary

Student Final Assessment & Certificate:

- Detail method of assessing students, such as tests and practical projects
- Describe the criteria for successful completion
- All certificates of completion should be branded as MAGMA certifications

Cost:

- Responses should include a total cost for training
- Minimum and maximum registration requirements for course viability should be detailed for each course
- Flexible payment terms are encouraged, Net 90 preferred.



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Application Requirements

Eligibility:

- Eligible applicants are education and training providers with a significant presence in the State of Michigan including but not limited to universities, community colleges, private training providers, and industry associations.
- Proposals may be submitted by a single institution or in partnership with multiple institutions. Cross-institutional partnerships are encouraged to create the right mix of theoretical knowledge with practical experience and make the most efficient use of established curriculums, facilities, laboratories, and equipment. If the proposal is submitted in partnership, a lead agency must be identified to serve as the applicant.
- All providers must be registered on the Michigan Training Connect (MiTC) prior to submission of proposal at <https://www.mitalent.org/mitc>

Proposal Delivery:

Proposals must be delivered electronically via PDF. Microsoft Word and Excel files will be accepted for supplemental files. Proposals received in other formats will not be considered. Please use the template in Appendix I to submit proposals along with a cover sheet containing the following information: name of the submitting institution and contact information for the person(s) submitting the proposal (name, title, phone, email).

Submit proposals electronically to Ms. Michelle Wein at michelle.wein@winintelligence.org with "MAGMA 2019 RFP Application" in the subject line not later than 5pm EST November 15, 2019.

Review Process:

Proposals received by WIN are evaluated by designated members of the MAGMA Governing Board and WIN staff. The review committee will recommend MAGMA endorsement of education and training programs that most closely meet the needs identified by industry employers.



Evaluation:

- Course/Certificate Program Content.....40 points
- Course/Certificate Syllabus..... 20 points
- Student Assessment..... 20 points
- Quality of Application & Relevance 20 points
- TOTAL..... .100 points

All proposals submitted must be open to negotiation and/or modification. The review committee has the option to recommend changes to applicant’s proposals prior to awarding the RFP. The Governing Board has final approval of all education and training endorsed and awarded by MAGMA.

Reporting Requirements:

Upon completion of the course/certificate program, the selected education and training provider(s) must commit to report the following information to the MAGMA Governing Board:

- Number of students enrolled
- Education level of enrolled students
- Demographic information (EEO) of enrolled students
- Number of students completing the program
- Student assessment results including practical project results
- Additional reporting as recommended by the training provider
- Student responses to survey of courses upon completion of course



Appendix I

RFP Submission Template

Course Title: XX

Course Length: XX days & XX hours

Time Online: XX

Time in Class: XX

Time in lab (if applicable): XX

Course Delivery Format: XX

Minimum Class Size: __

Maximum Class Size: __

Total Course Cost: \$ __

Course Description:

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Lab Projects Description:

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Course Learning Objectives:

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Course Content/Syllabus:

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Instructor Qualifications

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