

Profile: Continuing Education and Training with the AGMA

Programs for professional development of the gear-manufacturing workforce

Aaron Fagan, Senior Editor

The American Gear Manufacturers Association (AGMA) recently applied for and received reaccreditation from the International Accreditors for Continuing Education and Training (IACET) organization for its educational courses. An IACET accreditation allows gear industry professionals to earn Continuing Education Units (CEUs) for attending AGMA courses.

CEUs are an integral aspect of employment in the gear industry for many professionals, as numerous positions within the gear industry are required to earn a certain amount of CEUs per year. The amount required varies depending on the state of residence and employment.

Students who have taken IACET-accredited courses have shared that earning CEUs can be an essential factor in their company choosing AGMA educational offerings. It also assures AGMA instructors that their curriculum has undergone a rigorous evaluation process that ensures the lessons will enrich the gear industry.

Each year's educational offerings include a variety of instructor-led in-person and virtual course offerings, asynchronous online courses, webinars, and on-site training bespoke to your team's needs. The sidebars "AGMA Education Resources" on page 25 and "2023 AGMA Courses" on page 26 will help you get started.

AGMA's renewed accreditation is valid for a period of five years, through November 2027. "I am thrilled that we have been reaccredited and am excited to continue to offer the high-quality training that we do," stated Stephanie Smialek, Education Manager, AGMA. "The feedback that we receive from our participants helps us continually improve the courses we offer and are considering for the future. This, in turn, helps us provide a needs analysis to enhance our courses and topics for accreditation compliance." To celebrate, *Gear Technology* caught up with Smialek to discuss the full breadth of AGMA's professional development programs.

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Aaron Fagan: What is a concise overview of the AGMA educational offerings?

Stephanie Smialek: We want to be the premier educational source companies turn to for training. We are constantly looking to refine our existing courses and develop new ones both for in-person and online.

I think the slowdown of the pandemic presented an opportunity for us to do a lot of shorter courses and those continue to be well received. They are constantly filling up. I hope to include more short programs and things like that in the future because it seems like they manage to convey a lot of valuable information in a short period.

We have quite a bit of educational material online that is free to AGMA members. Even the older webinars garner a lot of use from members and nonmembers alike. Webinars are useful because they offer short insights on a topic someone is trying to get more information about. And then our on-demand classes also do well, and I've found they are especially helpful to our international participants who want to work towards a certificate but don't necessarily have the means to fly to the US for one of our in-person courses. I know with the expansion of our online offerings, we have had a considerable number of international participants join us, and that's something we want to see continue into next year.

Any countries in particular? I know India, Italy, and Germany are big gear countries.

You know what, it's great, they come from all over the world. I've had a couple of people from Vietnam and Singapore, and quite a few from the UK. Canada sends a lot of people. Mexico has been increasingly sending more and more. If we can increase international participation in education, that would be great, because then we're bringing in new people with new ideas.

There are courses that would appeal to designers right through to process engineers and machinists and everybody in between. Closed-loop training if you will. What's the student profile?

We have a wide range of backgrounds and all levels of education. We see quite a few machinists in our operator classes, on-site training, basics of gearing classes, and on-demand classes like our workforce training series. In terms of our more advanced courses, it heavily leans towards design or technical applications engineers. The overarching course list is a comprehensive mix. We've even had some executives take the courses before just to see what it's about and brush up on their information.

Are classes held all over the place or do they tend to be in one place?

We hold them all over. We tend to return to places like Clearwater Beach, Florida. That's a very popular destination.

AGMA EDUCATION RESOURCES

Archived webinars free to AGMA members:

agma.org/education/online/webinars/

Video trainings:

agma.org/education/online/video-training/

Workforce training series trainings:

agma.org/education/online/workforce-training-series/

Onsite training information:

agma.org/education/on-site-training/

Certificate programs we offer:

agma.org/education/certificate-programs/

Become an AGMA instructor:

agma.org/education/become-an-agma-instructor/

But we do try to move some things around. There's always going to be something on the east coast, but this coming year I wanted to go to somewhere on the west coast, so we're going to go to San Diego. We might do somewhere in the middle—maybe we'll do Denver or Texas, something like that. That allows more people the opportunity to participate. We also try to think about what classes are going to be appropriate to industries in the regions we choose. San Diego, for example, is near Silicon Valley and a lot of tech areas. And



In August, AGMA President Matt Croson held a ribbon-cutting ceremony for National Training Center (NTC), in partnership with Richard J. Daley College, in Chicago. The AGMA NTC provides industry-focused events and training for gear manufacturing professionals and year-round classes for novices and experts alike.

for the most part, the classes that are at the AGMA National Training Center (NTC) at Daley College in Chicago are the ones that utilize the machines in some way, but we are hoping to expand to do a few others that don't necessarily involve the machines but utilize the space that we have.

The NTC just had the ribbon cutting back in August. Can you give a little bit of the back story?

Daley College has these buildings in one part of their campus, and we lease out a building. At the ribbon cutting, we showcased the new signs we had put up both outside and inside the building. We want to house a lot of our classes here because Chicago is an ideal, centralized hub and many of the classes utilize the machines we have here.

Can you speak to on-site training?

Yes! It's expanding. We got quite a few inquiries this past year alone. From what I see, if they have a large enough group, they want to reach out and try to do training on their own terms. And that's where a lot of that on-site training comes into play.

Let's say they have this group of 10 to 20 people, and they want to get them all trained on this one specific topic—companies inquire for us to bring an instructor to them instead of them paying to send all their employees to us. Ten registrations, for example, to come to a class, plus then all the travel and whatnot for each of those individuals can add up quickly. They can save some money by having that training at their facility, and then the nice beneficial thing about it is we can make it directly applicable to the people who are in the class.

What makes it nice with on-site training is you can address detailed questions. And a lot of that information is often proprietary. In a regular class context, you wouldn't be able to share that kind of information where 20 different organizations might be represented. On-site training holds a lot of value for the companies they serve. We've already scheduled four for next year and we haven't even finished the month of November.

That's fantastic!

Yeah, there's definitely a lot of interest in it, which is really great because of that customizability.

How does that side of it work? This is a service that can be developed regardless of whether the company is an AGMA member.

Correct. We don't care if they're a member or nonmember. The pricing will change, so that does play a factor, but that also applies to all of our other classes. We have member rates and then our nonmember rates. For example, we have a group through the government that is in a couple of classes now. They're not members, but they reached out to us because they know we can provide the good training that they're looking for.

2023 AGMA Courses

Registration for all 2023 AGMA Education courses is now open. Topics include gear manufacturing, gear inspection, design basics, gear failure, gear chart interpretation, gear systems, and much more. Online and in-person courses on offer this year include:

- ☐ ANALYTICAL GEAR CHART INTERPRETATION**
- ☐ BASIC GEAR INSPECTION FOR OPERATORS
- ☐ BASIC TRAINING FOR GEAR MANUFACTURING**
- ☐ BEVEL GEAR SYSTEMS
- ☐ DESIGN BASICS FOR SPUR & HELICAL GEARS**
- ☐ DETAILED GEAR DESIGN
- ☐ EPICYCLIC GEAR SYSTEMS
- ☐ FUNDAMENTALS OF GEAR DESIGN & ANALYSIS
- ☐ GEAR FAILURE ANALYSIS**
- ☐ GEAR MANUFACTURING & INSPECTION
- ☐ GEAR SYSTEMS DESIGN FOR MINIMUM NOISE
- ☐ GEARBOX CSI
- ☐ GEARBOX SYSTEMS DESIGN
- ☐ HOW TO READ & INTERPRET A GEAR INSPECTION REPORT
- ☐ INVOLUTE SPLINE DESIGN & RATING
- ☐ LOADED TOOTH CONTACT ANALYSIS
- ☐ OPERATOR HOBBING & SHAPER CUTTING
- ☐ OPERATOR PRECISION GEAR GRINDING
- ☐ REVERSE ENGINEERING
- ☐ STEELS FOR GEAR MANUFACTURING
- ☐ WORM GEAR

agma.org/education/advanced-courses/

** COURSE IS OFFERED MORE THAN ONCE A YEAR.

To get the specifics for each course, visit AGMA's course catalogue. There, you'll find course outlines, learning objectives, instructor details, deals on hotel rooms for in-person courses, and more. If you have any trouble signing up for courses or have any questions, email education@agma.org.

Why don't they hire their own consultants?

They could easily reach out to the consultant themselves if they wanted to—and I'm sure we've had some companies who have gone directly to the consultant instead—but one of the benefits of doing it through AGMA is that you obviously get the certificates of completion, and if an AGMA representative goes, we are also accredited to offer the Continuing Education Units (CEUs) which is something some states require on an annual basis for those with professional licenses.

We just went through the reaccreditation process and have officially been reaccredited for another five years to offer CEUs, so that's exciting.

Are there any closing thoughts?

We offer a ton of different things for members and non-members alike. We want to continue to offer and improve

the great classes that we currently have and continue to offer additional courses on topics that are of interest to our constituents. The AGMA is constantly trying to expand and investigate where we can move and introduce new topics and new ideas to make sure that we're staying up to date on topics just as everybody else is.

Gear standards don't play a huge part in the classes, but they do come up, especially when we're talking about design and all those specifications. AGMA education ties into each different piece at AGMA from the standards to membership as well. We can encourage people to get membership if they like our courses and continue to bring and send people to our courses.

The closed loop.

Closed loop, yeah. It's fun getting to meet all these great people. I enjoy getting to know each person and getting to know the instructors.



The outfitting of the facility has been made possible by generous donations of time, dollars, machinery, and materials to the AGMA Foundation. It is an incredible industry resource to train and upskill new and experienced workers within the gear industry.