

# CIM Growth Continues to Meet Concrete Industry Needs

By the Concrete Industry Management National Steering Committee

**C**onstruction is the only goods-producing sector of the U.S. economy that is expected to grow through 2012, and, where there's construction, there's concrete—second only to water as the most highly used substance in the world. In the United States, concrete is over a \$100 billion industry. On the repair, protection, and strengthening side, over \$20 billion is spent annually by owners. The concrete industry employs over 500,000 people in a variety of careers. These individuals build and repair the nation's buildings, parking garages, bridges, dams, and public works that keep America's infrastructure strong.

To respond to this need, however, there have to be professionals trained in concrete technology, construction, and management. For the repair contractor, this is critical. Concrete is being used in more innovative ways than ever before, which has created an urgent need for individuals with focused concrete technology skills who also have a broad education (math, science, oral and written communication, and management) to move the industry forward. According to James J. Ernzen, PhD, PE, Interim Director, Del E Webb School of Construction, Arizona State University, though concrete is a complex component of every construction project, it often fails to receive adequate attention in construction management and civil engineering curricula at the university level. As such, recognizing the need for people with enhanced technical, communication, and management skills, the Concrete Industry Management (CIM) program was developed in 1996. The CIM program is the first of its kind in U.S.—a 4-year Bachelor of Science degree in concrete industry management. The CIM program enrolled its first two students at Middle Tennessee State University (MTSU). The popularity of the program has taken off ever since, with more than 300 students pursuing degrees in CIM. To meet the vast interest of the program and recognizing the need to expand, the current program is offered not only at MTSU but also at Arizona State University, California State University-Chico, and the New Jersey Institute of Technology.

"The Concrete Industry Management program fills a huge void in the training and educating of concrete industry professionals," said Ed Sauter, Executive Director, Concrete Foundations

Association and Tilt-Up Concrete Association. "The concrete industry has become much more complex as we enter the new millennium and while on-the-job training is still a necessity, a broad base understanding of concrete and business is required to advance the industry. Graduates of the program entering the market are already making a difference. This is a program that all concrete industry associations, contractors, manufacturers, and professionals should support."

## Responding to the Need

The concrete industry is looking to the CIM program to develop the workforce that's going to assume the roles of the concrete professionals who will be retiring during the next 10 to 15 years. To avoid losing that knowledge base, companies are hiring and will continue to hire industry-knowledgeable graduates to work side-by-side with their long-standing production, operations, technical support, and project managers; sales representatives; and others who serve as mentors to train and develop the future professionals of the concrete industry.

"CIM is an example of when industry vision meets opportunity," said Mike Schneider, Vice President of Operations, Baker Concrete Construction, Inc. To date, the concrete industry has invested more than \$2 million in CIM. Although currently supporting nearly 300 students, the concrete industry could easily support more than 500 CIM graduates per year. To increase enrollment, the concrete industry has committed to the program and its graduates by offering scholarships each year.

The CIM patrons continue to play a major role in helping support and advance the CIM program. They help provide concrete professionals, association leaders, and industry consultants who work with administrators to make sure CIM graduates are fully prepared for a career in the concrete industry.

## About the Program

The CIM program is a business-intensive program, providing solid management skills that can be used in any industry, but has been developed specifically for the concrete industry. The program gives students entering the concrete workforce an advantage because they gain valuable industry



experience early in their careers, unlike others who have generic business degrees.

The program entails a broad range of courses, from English and history to science and mathematics. A series of required business courses such as finance, marketing, management, and business law are also taken throughout the length of the program. The concrete-specific courses teach the fundamentals of concrete, including properties and testing, concrete repair, and concrete construction. All of these courses provide much more than what is simply in the text—they emphasize problem solving, quality assurance, and customer satisfaction. They use practical case studies and an internship to make sure the student obtains real-world experience essential to starting a successful career. Additional opportunities for growth include on-campus socials and other organized events providing industry networking and professional development.

The CIM program offers:

- A solid, well-rounded education within a specific industry, but with the professional tools necessary for any field;
- Opportunities in an industry that provides diverse career opportunities in both what you can do and where you can do it; and
- Career prospects in an industry that is hungry for well-educated and enthusiastic people to be its future leaders.

## Success to Date

There has yet to be a graduate of the CIM program that did not have an exciting career opportunity in the industry awaiting him or her. Graduates of the CIM program are hired for management positions throughout the concrete industry, including production, material supply, contracting, and manufacturing.

More than 150 students have graduated from CIM programs with starting salaries competitive with other high-tech industries. According to Michael Shydrowski, President of BASF Admixtures, Inc., and Vice Chairman of the National Steering Committee, the CIM program has been a great resource for new employees.

“We find that CIM graduates join our company with a strong awareness and knowledge of the concrete industry. This competitive edge enables them to make a positive contribution not just to our company, but the industry as a whole. To date, we have hired 16 CIM graduates and are continuously looking for more,” said Shydrowski. “We have found that the CIM program provides an excellent foundation for entering the repair industry,” said Brian Gallagher, Vice President with Structural Group. “These graduates understand concrete as a material, they have an understanding of construction, and have solid business acumen,” Gallagher added.

But, beyond accolades from the industry, the students also have declared the program a success. Lee Thrasher, a CIM graduate now employed with Ready Mix USA, stated that his involvement in the CIM program was an unbelievable experience. “As someone who is working in the concrete industry today, I can say we received a quality, valuable education,” said Thrasher.

Jason Dodson, a Project Manager with Structural Preservation Systems (SPS) in Houston, graduated from the CIM program in 2001. “The CIM program prepared me well for my career. In addition to the concrete course work, the business courses have been instrumental in my professional development.” Dodson interned with SPS during college and joined the firm upon graduation.

For Michael Conkwright, the CIM program at Middle Tennessee State University (MTSU) provided a new direction in life. Now a Sales Territory Manager in Knoxville, Tennessee, for National Ready Mixed Concrete Company, Conkwright didn't know which direction to head in before he joined the CIM program.

"I was bouncing from one job to another in such fields as residential construction and golf course management when my uncle showed me an article about the CIM program," recalls Conkwright. "I didn't want to spend time in college just earning a degree; I wanted a skill, a career. I wanted to learn about a certain business so that there would be real job opportunities when I graduated."

Four years later, when Conkwright graduated from the CIM program, he had a profound appreciation of the concrete industry and the determination to do well in one of the construction industry's least understood sectors.

"CIM graduates have a significant knowledge of the concrete industry which gives them a leg up on others when they go out in the world," he continues. "The CIM courses were very interesting, but what was even more appealing was that the program was supported by high-ranking industry executives who were so involved at MSTU. You don't find that level of interaction at many other universities."

The CIM program provided Conkwright with hands-on experience and an appreciation for how business—specifically the business of concrete—operates.

"I was especially appreciative of the CIM Senior Capstone Project, which required that you give a presentation, not only to your peers but also to industry executives," said Conkwright. "I prepared a 40-page report that I had to present to the executives. It was nerve-racking, but an experience that, for me, was priceless."

Upon graduation, Conkwright had numerous job offers. "MTSU students in other disciplines were surprised that I had all these job offers, but I don't think I would have had them without the CIM program," he explains. "This program offers endless opportunities for the person who is serious about a career and wants to work with a good company."

CIM graduate Christopher Davenport concurs that the program is a success. When he was working at Degussa Construction Chemicals' Master Builders unit, Christopher Davenport placed one of the first self-compacting concrete mixtures on the exterior walls of a contractor's office in Dallas, Texas.

"It was a pretty heady experience, because I was just barely out of college," recalls Davenport, who is now Regional Sales Director of Barnes Industrial Group based in Murfreesboro, Tennessee. "You have to be technically competent to handle that volatile self-compacting mix, which is different from your everyday 4-inch slump or five-sack mix.

I don't think I would have been able to handle it so early in my career if I wasn't a graduate of the CIM program. In the CIM program, I gained a true understanding of how concrete products are used as well as economic factors that control the product in the marketplace."

The CIM program provided a firm foundation for his career, Davenport adds. "Without the CIM courses and seminars, it would have taken me quite a few years to achieve the technical competence and industry confidence needed for high profile, special mixes. The CIM courses give you a broader information spectrum than what traditional civil engineering or construction management programs offer. You might take one course on concrete while studying as a civil engineer. But under the CIM program, you take 12 to 15 classes just on concrete, which gives you a terrific understanding of the product marketplace and the inner workings of the industry."

Hiring a CIM graduate offers "substantial savings" to companies, Davenport continues. "In the concrete industry, time is of utmost importance, so it's imperative to get new hires up to speed fast. Obviously, a company hiring a CIM grad gets a greater return for the company because CIM graduates are probably 2 to 5 years technically advanced over a civil engineer coming out of college in the field of concrete."

Davenport considers himself lucky enough to be accepted into the program. "I had a basic understanding of what concrete was from previous jobs but without the CIM program, I wouldn't have the necessary background, expertise, or opportunities. The opportunities are endless. Just talking with key industry leaders at MTSU is an added bonus; you wouldn't have been able to meet them without the program."

Says Davenport: "CIM is one of the most interesting, technically advanced, fulfilling programs that I'm aware of in any university type of setting. I don't know where I would be without the CIM program."

## The Future

Over the last 10 years, the CIM program has produced hundreds of graduates for the concrete industry. Now, with the program expanding beyond MTSU to Arizona State University, California State University-Chico, and the New Jersey Institute of Technology, the CIM program will be producing even more students for the industry. In addition, the program now offers concentrations in contracting and sales. For the repair industry, CIM offers well-rounded, concrete-focused graduates who can contribute in a number of roles.

To learn more about the CIM programs and how your company can be involved, visit [www.concretedegree.com](http://www.concretedegree.com).