



Technical Careers Division

Contact Hour / Credit Hour / Billing Hour Structure

Occupational programs within the disciplines of technical careers quite often utilize ‘hands-on’ teaching and learning for instruction. The community college degree for these programs are Associate in Applied Science degrees which, by definition, is “the discipline dealing with the art or science of applying scientific knowledge to practical problems.”

At Lansing Community College (LCC), a contact hour of instruction is equal to “50 minutes of student instruction in which a student is scheduled to come into contact with an instructor or with tutorial or laboratory equipment.” A credit hour is a minimum of 800 instructional minutes or 16 contact hours ($800 \div 50$).¹ The credit amount of each particular course is based on contact hours and represents the number of credits that a course “counts” toward degree requirements. Associate degree credit requirements at LCC range from 60 to 72 credits.

The minimum requirement for one lecture credit is 16 contact hours. The minimum requirement for one laboratory credit is 32 hours. In the Technical Careers Division, contact hours are based on the estimated time to deliver course outcomes in both the lecture setting and the laboratory (hands-on) setting. All laboratory contact ratios in the division are calculated 2:1. Additionally, some regulatory and accreditation agencies mandate contact hour requirements for both lecture and laboratory instruction. Example of accreditation agencies in the division include: Federal Aviation Administration (FAA), National Fire Protection Association (NFPA), International Fire Service Accreditation Congress (IFSAC), National Automotive Technicians Education Foundation (NATEF), American Bar Association (ABA), and Michigan Commission on Law Enforcement Standards (MCOLES). All laboratory contact ratios in the division are calculated 2:1.

LCC calculates the cost for attending a course by a course’s billing hours instead of credit hours. A billing hour represents 16 hours of instruction. Additionally, many courses have a course fee that is required to help cover the cost of consumable supplies, liability, software, equipment, and additional faculty to teach small groups of students. The top three factors impacting the cost and delivery of specialized technical instruction are:

1. Low student-to-faculty ratio
2. Number of instructional contact hours in the laboratory required to meet regulatory and accreditation standards
3. College liability for working in “live” settings

The following table demonstrates common contact, credit, and billing hour calculations based on a 16-week semester:

Course	Lecture Hours (Theory) 1:1	Laboratory Hours 2:1	Total Contact Hours	Credit Hours Toward Degree	Billing Hours (Tuition)
AUTM 112	16	32	48	2 <i>(1 lec + 2 lab)</i>	3
HVAC 110	32	32	64	3 <i>(2 lec & 2 lab)</i>	4
METS 140	24	48	72	3 <i>(1.5 lec + 3 lab)</i>	4.5
WELD 103	32	64	96	4 <i>(2 lec + 4 lab)</i>	6

¹ Course Contact Hours and Course Credit Hours as defined within the Activities Classification Structure Manual for Michigan Community Colleges, State of Michigan, Department of Energy, Labor and Economic Growth.