

# Chapter 5

## APPLIED SCIENCE DEGREE AND CERTIFICATE PLANS



# Associate of Applied Science (AAS)

Lee College offers Associate of Applied Science (AAS) degrees in 27 technical areas. AAS degrees require 60 to 72 college credits, or the equivalent of two full years of college work. The curriculum for AAS degrees includes coursework in a technical area as well as a core curriculum which includes courses in Communication, Mathematics, Life and Physical Sciences, Creative Arts, Language Philosophy, Government/Political Sciences, American History, Social/Behavioral Sciences, Communication and Kinesiology Area Option.

## Certificates of Completion

Lee College offers 57 Certificates of Completion. These programs are designed for students who are employed or plan to be employed in technical fields.

In most cases, the credits earned in a certificate program can be applied to an associate of applied science degree in the same area of study; however, there are programs in which this is not the case. In a few cases, the credits earned in certificate programs are transferable to associate of science degrees.

Students who are considering a certificate program as a first step in the process of earning an associate or baccalaureate degree should discuss their plans with a counselor.

## General Education for AAS Degrees

An AAS degree requires a minimum of 15 SCH of General Education courses. AAS degree earners will not have the description "core complete" on their transcripts unless they have completed the entire 42-43 SCH Core defined for AA and AS degrees.

<b>Communication</b>						<b>SCH</b>
	ENGL	1301	1302	2311	BUSI 1304	<b>3</b>
While only three hours of Communication are required for an AAS degree, students who plan to transfer to a university should take 6 hours to meet university requirements.						
<b>Communication Area Option</b>						<b>3</b>
	SPCH	1311	1315	1318	1321	
<b>Creative Arts/Language, Philosophy, (LPC)</b>						<b>3</b>
Choose one course from the Creative Arts/Language, Philosophy or Government/Political Sciences options in the Core Curriculum. (Identified as Creative Arts/LPC).						
<b>Social/Behavioral Sciences, American History, or Government/Political Sciences</b>						<b>3</b>
Choose one from Social/Behavioral Sciences, American History, Government/Political Sciences options from the Core Curriculum. (Identified as SBS/HIST/GOVT).						
<b>Life and Physical Sciences/Mathematics</b>						<b>3/4</b>
Choose one from Mathematics or Life and Physical Sciences options from the Core Curriculum. (Identified as LP Sciences/Mathematics).						

**Total Core Curriculum Credit hours** **15/16**

- Students should plan to take the capstone course in their last semester and should speak with their advisor prior to registering for the final semester. Core curriculum courses are shown in bold type.

# Associate of Applied Science Accounting Technology – AT2

Accounting, which is often called the “language of business,” provides essential information about the economic activities of a business to its owners, its creditors, and other groups. The two-year Accounting Technology Program is designed to prepare students for mid-level accounting positions, such as full-charge bookkeepers or clerical supervisors in business industry. Emphasis is placed on generally accepted accounting principles and internal accounting procedures, as well as computer applications.

Although the degree plan contains courses which may be applicable to a four-year accounting degree, it is primarily designed to prepare the student for immediate job placement. Students pursuing a bachelor’s degree in accounting should refer to the Associate of Science in Business Administration section of this catalog and see a counselor prior to registration.

Students desiring a less comprehensive program that includes some accounting procedures and practices should consider the Accounting Technician Certificate or Advanced Accounting Technician Certificate.

Students who have not had high school accounting or who have not worked in accounting may wish to take ACNT 1303, Introduction to Accounting I, before taking ACCT 2401, Principles of Accounting I: Financial.

Students should plan to take a capstone course, as listed below, in their last semester and should speak with an accounting advisor prior to registering for the final semester.

FIRST SEMESTER		SCH
___	ACCT 2401 Principles of Accounting I – Financial	4
___	ENGL 1301 English Composition I	3
___	POFI 1401 Computer Applications I	4
___	POFT 1325 Business Math and Machine Applications	3
___	ACNT 1331 Federal Income Tax: Individual	3
		<b>17</b>

SECOND SEMESTER		
___	ACCT 2402 Principles of Accounting II - Managerial	4
___	POFT 2312 Business Correspondence & Communication	3
___	ACNT 1311 Introduction to Computerized Accounting	3
___	ACNT 1329 Payroll & Business Tax Accounting	3
___	---- ---- Business Elective*	3
		<b>16</b>

THIRD SEMESTER		
___	ACNT 2303 Intermediate Accounting I	3
___	ACNT 1313 Computerized Accounting Applications	3
___	BUSI 1301 Business Principles	3
___	SPCH 1315 Principles of Public Speaking or	
___	SPCH 1321 Business & Professional Communication	3
___	---- ---- LP Sciences/Mathematics	3/4
		<b>15/16</b>

FORTH SEMESTER		
___	ACNT 2304 Intermediate Accounting II	3
___	BUSI 2301 Business Law	3
___	ACNT 2309 Cost Accounting	3
___	---- ---- SBS/GOVT/HIST	3
___	---- ---- Creative Arts/LPC	3
___•	ACNT 2389 Internship – Accounting or	
___•	ACNT 2302 Accounting Capstone	3
		<b>18</b>
	<b>Total Semester Credit Hours for Degree</b>	<b>66/67</b>

*Business elective to be chosen from ACNT, BUSI, or BUSG courses.*

## Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Accounting Technician–TA1

The Certificate Programs in accounting are composed of coursework designed to prepare the student for entry-level accounting positions, such as accounts receivable clerk, accounts payable clerk, small office bookkeeper, cashier, or payroll clerk. The programs are designed for the student who plans to seek employment at the end of two or three semesters of training. All courses may apply toward the Associate of Applied Science (AAS) in Accounting Technology Degree.

Students who have not had high school accounting or who have not worked in accounting may wish to take ACNT 1303, Introduction to Accounting I, before taking ACCT 2401, Principles of Accounting I: Financial.

FIRST SEMESTER	SCH
___ ACCT 2401 Principles of Accounting I - Financial	4
___ POFT 1325 Business Math and Machine Applications	3
___ POFI 1401 Computer Applications I	4
___ ACNT 1331 Federal Income Tax: Individual	3
___ POFT 1301 Business English or	
___ ENGL 1301 English Composition I	3
	<b>17</b>
SECOND SEMESTER	
___ ACCT 2402 Principles of Accounting II – Managerial	4
___ ACNT 1311 Introduction to Computerized Accounting	3
___ POFT 2312 Business Correspondence & Communication	3
___ ACNT 1329 Payroll & Business Tax Accounting	3
___ ACNT 1313 Computerized Accounting Applications	3
___• ACNT 2386 Internship-Accounting Technology/ Technician & Bookkeeping or	
___• ACNT 2302 Accounting Capstone	3
	<b>19</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>36</b>

## Certificate of Completion Advanced Accounting Technician–AT1

FIRST SEMESTER	SCH
___ ACCT 2401 Principles of Accounting I - Financial	4
___ POFT 1325 Business Math and Machine Applications	3
___ POFI 1401 Computer Applications I	4
___ ACNT 1331 Federal Income Tax: Individual	3
___ POFT 1301 Business English or	
___ ENGL 1301 English Composition I	3
	<b>17</b>
SECOND SEMESTER	
___ ACCT 2402 Principles of Accounting II - Managerial	4
___ ACNT 1311 Introduction to Computerized Accounting	3
___ POFT 2312 Business Correspondence & Communication	3
___ ACNT 1329 Payroll & Business Tax Accounting	3
___ BUSI 1301 Business Principles	3
	<b>16</b>
THIRD SEMESTER	
___ ACNT 2303 Intermediate Accounting I	3
___ ACNT 1313 Computerized Accounting Applications	3
___ ACNT 2309 Cost Accounting	3
___ BUSI 2301 Business Law	3
___• ACNT 2387 Internship – Accounting Technology/Technician & Bookkeeping or	
___• ACNT 2302 Accounting Capstone	3
	<b>15</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>48</b>

# Business Administration and Management

## Associate of Applied Science Management – MN2

FIRST SEMESTER		SCH
—	BMGT 1301 Supervision	3
—	ENGL 1301 English Composition I	3
—	COSC 1301 Introduction to Computing or	
—	BCIS 1405 Business Computer Applications	3/4
—	HRPO 1311 Human Relations	3
—	BMGT 1341 Business Ethics	3
		<b>15/16</b>
SECOND SEMESTER		
—	SPCH 1321 Business & Professional Communication	3
—	BUSI 1301 Business Principles	3
—	ACNT 1303 Introduction to Accounting I or	
—	ACCT 2401 Principles of Accounting I Financial	3/4
—	HRPO 2301 Human Resource Management	3
—	MRKG 1311 Principles of Marketing	3
		<b>15/16</b>
THIRD SEMESTER		
—	BMGT 1331 Production & Operations Management	3
—	BMGT 1325 Office Management	3
—	---- SBS/GOVT/HIST	3
—	IBUS 1305 Introduction to International Business	3
—	BMGT 1307 Team Building	3
		<b>15</b>
FOURTH SEMESTER		
—	BUSI 2301 Business Law	3
—	---- LP Sciences/Mathematics	3/4
—	BUSG 2309 Small Business Management	3
—	---- Creative Arts/LPC	3
—•	BMGT 1327 Principles of Management	3
—	BMGT 2388 Internship - Business Administration and Management, General	3
		<b>18/19</b>
<b>Total Semester Credit Hours for Degree</b>		<b>63/66</b>

## Certificate of Completion Management – MN1

FIRST SEMESTER		SCH
—	BMGT 1301 Supervision	3
—•	BMGT 1327 Principles of Management	3
—	BMGT 1307 Team Building	3
—	HRPO 2301 Human Resource Management	3
—	HRPO 1311 Human Relations	3
		<b>15</b>
SECOND SEMESTER		
—	BMGT 1325 Office Management	3
—	BMGT 1331 Production & Operations Management	3
—	BUSG 2309 Small Business Management	3
—	ACNT 1303 Introduction to Accounting I or	
—	ACCT 2401 Principles of Accounting I – Financial	3/4
		<b>12/13</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>27/28</b>

## Certificate of Completion Marketing – MK1

FIRST SEMESTER		SCH
—•	MRKG 1311 Principles of Marketing	3
—	BUSI 1301 Business Principles	3
—	GISC 1311 Introduction to GIS	3
		<b>9</b>
SECOND SEMESTER		
—	IMED 2309 Internet Commerce	3
—	BUSI 2301 Business Law	3
—	IBUS 1305 Introduction to International Business	3
		<b>9</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>18</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Entrepreneurship – BE1

The Certificate of Entrepreneurship is designed for individuals who plan to open their own business and/or those students who want to work for a small organization (usually one with fewer than fifty full-time employees) in a leadership role. With the assistance of the Management Faculty Advisor, these courses can become part of an AAS in Management for students who want to continue their education.

FIRST SEMESTER	SCH
___ BMGT 1301 Supervision	3
___ ACNT 1303 Introduction to Accounting I or	
___ ACCT 2401 Principles of Accounting I – Financial	3/4
___ BUSI 1301 Business Principles	3
___ MRKG 1311 Principles of Marketing	3
	<b>12/13</b>
SECOND SEMESTER	SCH
___ BUSI 2301 Business Law	3
___ IMED 2309 Internet Commerce	3
___ IBUS 1305 Introduction to International Business	3
___• BUSG 2309 Small Business Management	3
	<b>12</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>24/25</b>

## Certificate of Completion Business – BU1

FIRST SEMESTER	SCH
___• BUSI 1301 Business Principles	3
___ BMGT 1327 Principles of Management	3
___ BUSI 2301 Business Law	3
___ MRKG 1311 Principles of Marketing	3
___ BMGT 1331 Production & Operations Management	3
	<b>15</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>15</b>

## Certificate of Completion International Business – IB1

FIRST SEMESTER	SCH
___ BUSI 1301 Business Principles	3
___ BMGT 1327 Principles of Management	3
___ MRKG 1311 Principles of Marketing	3
___• IBUS 1305 Introduction to International Business & Trade	3
___ ---- ---- SBS/GOVT/HIST	3
	<b>15</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>15</b>

## Certificate of Completion Supervision – SU1

FIRST SEMESTER	SCH
___• BMGT 1301 Supervision	3
___ MRKG 1311 Principles of Marketing	3
___ BMGT 1307 Team Building	3
	<b>9</b>
SECOND SEMESTER	SCH
___ HRPO 2301 Human Resource Management	3
___ BMGT 1331 Production & Operations Management	
or	
___ BMGT 1325 Office Management	3
	<b>6</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>15</b>

# Communications (Audio Recording)

## Associate of Applied Science Audio Engineering Technology – AET2

FIRST SEMESTER		SCH
___ MUSC 1427	Audio Engineering I	4
___ MUSC 1331	MIDI I	3
___ MUSB 1305	Survey of Music Business	3
___ MUSI 1303	Fundamentals of Music	3
	or	
___ MUSI 1311	Music Theory I	3
___ MUSI 1181	Piano Class I (or Applied Piano)	1
___ ENGL 1301	English Composition I	3
		<b>17</b>
SECOND SEMESTER		
___ MUSC 1323	Audio Electronics	3
___ MUSC 2427	Audio Engineering II	4
___ MUSC 2355	MIDI II	3
___ MUSI 1306	Music Appreciation	
	or	
___ MUSI 1310	American Music	3
___ SPCH ----	Communication Area Option	3
		<b>16</b>
THIRD SEMESTER		
___ MUSC 2447	Audio Engineering III	4
___ RTVB 1321	TV Field Production	3
___ MUSC 1335	Commercial Music Software	3
___ MUAP ----	Applied Music Elective	1
___ ----	SBS/GOVT/HIST	3
___ MATH 1332	Contemporary Math I	
	or	
___ MATH 1314	College Algebra	3
		<b>17</b>
FOURTH SEMESTER		
___ MUAP ----	Applied Music Elective	1
___ MUSC 2448	Audio Engineering IV	4
___ MUSB 2350	Commercial Music Project	3
___• MUSC 2386	Internship – Recording Arts Technology/Technician	3
___ MUSC 1396	Special Topics in Recording Arts Technology	
	or	
___ MUSC ----	Elective	3/4
		<b>14/15</b>
<b>Total Semester Credit Hours for Degree</b>		<b>64/65</b>

## Certificate of Completion Audio Engineering Technology – AET1

FIRST SEMESTER		SCH
___ MUSC 1427	Audio Engineering I	4
___ MUSC 1331	MIDI I	3
___ MUSB 1305	Survey of Music Business	3
___ MUSI 1303	Fundamentals of Music	
	or	
___ MUSI 1311	Music Theory I	3
___ MUSI 1181	Piano Class I (or Applied Piano)	1
		<b>14</b>
SECOND SEMESTER		
___ MUSC 2427	Audio Engineering II	4
___ MUSC 2355	MIDI II	3
___ MUSC 1335	Commercial Music Software	3
___ MUSI 1306	Music Appreciation	
	or	
___ MUSI 1310	American Music	3
		<b>13</b>
THIRD SEMESTER		
___ MUSC 2447	Audio Engineering III	4
___ MUSC 1323	Audio Electronics	3
___ RTVB 1321	TV Field Production	3
___ MUSC 1396	Special Topics in Recording Arts Technology	3
		<b>13</b>
FOURTH SEMESTER		
___ MUSC 2448	Audio Engineering IV	4
___ MUSB 2350	Commercial Music Project	3
___• MUSC 2386	Internship – Recording Arts Technology/Technician	3
___ MUAP ----	Applied Music	1
		<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>51</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Music Studio Production – MSP1

FIRST SEMESTER		SCH
___•	MUSC 1427 Audio Engineering I	4
___	MUSC 1331 MIDI I	3
___	MUSB 1305 Survey of Music Business	3
___	MUSI 1303 Fundamentals of Music	
	or	
___	MUSI 1311 Music Theory I	3
___	MUSI 1181 Piano Class I (or Applied Piano)	1
		<b>14</b>
SECOND SEMESTER		
___	MUSC 2427 Audio Engineering II	4
___	MUSC 2355 MIDI II	3
___	MUSC 1335 Commercial Music Software	3
___	MUSI 1306 Music Appreciation	
	or	
___	MUSI 1310 American Music	3
		<b>13</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>27</b>

## Certificate of Completion Sound Reinforcement Technology – SRT1

The Sound Reinforcement Technology certificate prepares students for a career in the live sound industry. Students will learn the skills necessary to operate, maintain, design, and install sound systems in a variety of settings. Career opportunities include working with touring companies, concert venues, sports facilities, theaters, house of worships, convention halls, and many other kind of venues. Students completing this program are TSIA responsible.

FIRST SEMESTER		SCH
___	MUSC 1427 Audio Engineering I	4
___	MUSC 1405 Live Sound I	4
___	MUSC 2402 Sound Systems Technician	4
___	MUSB 1305 Survey of Music Business	3
		<b>15</b>
SECOND SEMESTER		
___	MUSC 2427 Audio Engineering II	4
___	MUSC 2403 Live Sound II	4
___	MUSC 2459 Sound System Optimization	4
___	RTVB 1321 TV Field Production	3
		<b>15</b>
THIRD SEMESTER		
___•	MUSC 2386 Internship – Recording Arts Technology Technician	3
___	MUSC 2453 Live Sound III	4
		<b>7</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>37</b>



# Computer Technology

## Associate of Applied Science Computer and Graphics Technology – CGT2

The Computer Technology Computer and Graphics Technology program is designed primarily for students seeking employment with organizations that use computers to process, design, manage, and communicate information. The program prepares individuals to provide technical assistance, support, and advice to computer users to help troubleshoot software and hardware problems. Includes instruction in computer concepts, information systems, networking, operating systems, computer hardware, the Internet, software applications, help desk concepts and problem solving, and principles of customer service.

FIRST SEMESTER		SCH
___	ITSC 1309 Integrated Software Applications I	3
___	ARTC 1413 Digital Publishing I	3
___	ARTC 1453 Computer Illustration	3
___	GISC 1311 Introduction to GIS	3
___	IMED 1316 Web Design I	3
		<b>15</b>
SECOND SEMESTER		
___	ARTC 2440 Computer Illustrations II	4
___	IMED 1445 Interactive Digital Media	4
___	---- ---- SBS/GOVT/HIST	3
___	ITSC 2321 Integrated Software Applications II	3
___	ITSE 1331 Introduction to Visual Basic Programming	3
		<b>17</b>
THIRD SEMESTER		
___	CPMT 1449 Computer Networking Technology	4
___	IMED 2311 Portfolio Development	3
___	IMED 2309 Internet Commerce	3
___	ENGL 1301 English Composition I	3
___	---- ---- Creative Arts/LPC	3
		<b>16</b>
FOURTH SEMESTER		
___	CPMT 1411 Introduction to Computer Maintenance	4
___	ITSC 1316 Linux Installation and Configuration	3
___	SPCH ---- Communication Area Option	3
___	• IMED 2315 Web Design II*	4
___	---- ---- LP Sciences/Mathematics	3/4
		<b>17/18</b>
<b>Total Semester Credit Hours for Degree</b>		<b>63/64</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

\* Students should plan to take this capstone course in their last semester and should speak to their advisor prior to registering for the final semester.

## Certificate of Completion Computer and Graphics Technology I – CGT1

The Computer Technology - User and Computer Support Certificate of Completion II is a level-two award designed primarily for students seeking employment with organizations that use computers to process, design, manage, and communicate information. Emphasis is placed on the use of computer software in the solution of business and scientific problems, design and development of Web pages, and desktop computer hardware and software support.

FIRST SEMESTER		SCH
___	ITSC 1309 Integrated Software Applications I	3
___	ARTC 1413 Digital Publishing I	4
___	ARTC 1453 Computer Illustration	4
___	GISC 1311 Introduction to GIS	3
___	IMED 1316 Web Design I	3
		<b>17</b>
SECOND SEMESTER		
___	ARTC 2440 Computer Illustrations II	4
___	IMED 1445 Interactive Digital Media	4
___	IMED 2315 Web Design II	3
___	ITSC 2321 Integrated Software Applications II	3
___	ITSE 1331 Introduction to Visual Basic Programming	3
		<b>17</b>
THIRD SEMESTER		
___	CPMT 1411 Introduction to Computer Maintenance	4
___	CPMT 1449 Computer Networking Technology	4
___	• IMED 2311 Portfolio Development	3
___	ITSC 1316 Linux Installation and Configuration	3
___	IMED 2309 Internet Commerce	3
		<b>17</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>51</b>

## Certificate of Completion Computer and Graphics Technology II– CGR1

The Computer Technology - User and Computer Support Certificate of Completion I is a level-one award is designed primarily for students seeking employment with organizations that use computers to process, design, manage, and communicate information. Emphasis is placed on the use of computer software in the solution of business and scientific problems, design and development of Web pages, and desktop computer software support.

FIRST SEMESTER	SCH
___ ITSC 1309 Integrated Software Applications I	3
___ ARTC 1413 Digital Publishing I	4
___ ARTC 1453 Computer Illustration	4
___ GISC 1311 Introduction to GIS	3
___ IMED 1316 Web Design I	3
	<b>17</b>
SECOND SEMESTER	
___ ARTC 2440 Computer Illustrations II	4
___ IMED 1445 Interactive Digital Media	4
___• IMED 2315 Web Design II	3
___ ITSC 2321 Integrated Software Applications II	3
___ ITSE 1331 Introduction to Visual Basic Programming	3
	<b>17</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>34</b>

## Certificate of Completion Application Specialization – AS1

The Computer Technology Application Specialization curriculum provides students with an introduction to data processing and allow persons already engaged in business and industry to increase their computer knowledge.

FIRST SEMESTER	SCH
___ ITSC 1309 Integrated Software Applications I	3
___ ARTC 1413 Digital Publishing I	4
___ ARTC 1453 Computer Illustration	4
___ GISC 1311 Introduction to GIS	3
___• IMED 1316 Web Design I	3
	<b>17</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>17</b>

# Computer Technology

## Associate of Applied Science Computer and Network Maintenance Technology – CNET2

This Program is designed to prepare students with concepts and skills required for entry-level employment into computer support and maintenance careers. Completion prepares the student with CISCO routing skills.

FIRST SEMESTER			SCH
___	ITSC	1309 Integrated Software Applications I	3
___	CPMT	1411 Introduction to Computer Maintenance	4
___	CPMT	1449 Computer Networking Technology	4
___	TECM	1341 Technical Algebra	3
			<b>14</b>

SECOND SEMESTER			SCH
___	ITCC	1408 Intro. to Voice over Internet Protocol (VoIP)	4
___	TECM	1349 Technical Math Applications	3
___	ITCC	1401 Exploration: Network Fundamentals	4
___	SPCH	---- Communication Area Option	3
___	----	---- Creative Arts/LPC	3
			<b>17</b>

THIRD SEMESTER			SCH
___	ITCC	1404 Cisco Exploration 2 - Routing Protocols & Concepts	4
___	ITSC	1316 Linux Installation and Configuration	3
___	ENGL	1301 English Composition I or	
___	BUSI	1304 Business Report Writing & Correspondence	3
___	IMED	1316 Web Design I	3
___	----	---- LP Sciences/Mathematics	3/4
			<b>16/17</b>

FOURTH SEMESTER			SCH
___	• CPMT	2449 Advanced Computer Networking Technology*	
			or
___	• CPMT	2488 Internship - Computer Installation and Repair Technology/Technician	4
___	ITCC	2408 Cisco Exploration 3 - LAN Switching and Wireless	4
___	ITCC	2410 Cisco Exploration 4 - Accessing the WAN	4
___	----	---- SBS/GOVT/HIST	3
			<b>15</b>
<b>Total Semester Credit Hours for Degree</b>			<b>62/63</b>

## Certificate of Completion Computer Maintenance Technology – MT1

FIRST SEMESTER			SCH
___	ITSC	1316 Linux Installation and Configuration	3
___	TECM	1341 Technical Algebra	3
___	CPMT	1449 Computer Networking Technology	4
___	CPMT	1411 Introduction to Computer Maintenance	4
			<b>14</b>

SECOND SEMESTER			SCH
___	ITCC	1408 Intro. to Voice over Internet Protocol (VoIP)	4
___	TECM	1349 Technical Math Applications	3
___	ITCC	1401 Exploration: Network Fundamentals	4
___	• CPMT	---- Capstone Course*	4
<b>Total Semester Credit Hours for Certificate</b>			<b>29</b>

\*The capstone experience will be assigned by the Lead Instructor as CPMT 2449 or CPMT 2488.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Network Maintenance Technology – NET1

FIRST SEMESTER			SCH
__	CPMT 1449	Computer Networking Technology	4
__	CPMT 1411	Introduction to Computer Maintenance	4
			<b>8</b>
SECOND SEMESTER			
__	ITCC 1401	Exploration: Network Fundamentals	4
__	ITCC 1404	Cisco Exploration 2 – Routing Protocols & Concepts	4
__	ITCC 1408	Intro. to Voice over Internet Protocol (VoIP)	4
			<b>12</b>
THIRD SEMESTER			
__	• CPMT 2449	Advanced Computer Networking Technology*	
		or	
__	• CPMT 2488	Internship: Computer Installation & Repair Technology*	4
__	ITCC 2408	Cisco Exploration 3: LAN Switching & Wireless	4
__	ITCC 2410	Cisco Exploration 4: Accessing the WAN	4
			<b>12</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>32</b>

\*Students should plan to take this capstone course in their last semester and should speak to their advisor prior to registering for the final semester.

# Cosmetology

## Associate of Applied Science Cosmetology Instructor – CI2

To earn this degree, students must have a GED or high school diploma and a valid TDLR Cosmetology Operator License.

FIRST SEMESTER		SCH
___	CSME 1435 Orientation to the Instruction of Cosmetology	4
___	CSME 1434 Cosmetology Instructor I	4
___	ENGL 1301 English Composition I	3
___	ITSC 1309 Integrated Software Applications I	3
___	---- ---- Elective	3
		<b>17</b>
SECOND SEMESTER		SCH
___	CSME 2414 Cosmetology Instructor II	4
___	CSME 2415 Cosmetology Instructor III	4
___	ENGL 1302 English Composition II or	
___	ENGL 2311 Technical Writing	3
___	SPCH 1315 Principles of Public Speaking	3
___	BMGT 1301 Supervision	3
		<b>17</b>
THIRD SEMESTER		SCH
___	CSME 2444 Cosmetology Instructor IV	4
___	BMGT 1307 Team Building	3
___	---- ---- LP Sciences/Mathematics	3/4
___	HUMA 1301 Introduction to the Humanities I or	
___	PHIL 1301 Introduction to Philosophy	3
		<b>13/14</b>
FOURTH SEMESTER		SCH
___	• CSME 2445 Instructional Theory & Clinic Operation	4
___	HRPO 1311 Human Relations	3
___	---- ---- SBS/GOVT/HIST	3
___	---- ---- Elective	3
		<b>13</b>
<b>Total Semester Credit Hours for Degree</b>		<b>60/61</b>

## Certificate of Completion Cosmetology – CO1

This Certificate Program will provide for 1500 hours of instruction scheduled to be completed within 12 months. This program will provide students with an opportunity to learn the basic manipulative and theoretical skills necessary to become a licensed cosmetologist.

To earn a certificate, students must successfully complete courses contained in a block unit taught in three semesters. To be eligible for licensing by the Texas Department of Licensing and Regulation, the students must have successfully completed the following courses of study and must show satisfactory completion of the State Administered Examination.

FIRST SEMESTER		SCH
___	CSME 1505 Fundamentals of Cosmetology	5
___	CSME 1410 Introduction to Haircutting & Related Theory	4
___	CSME 1453 Chemical Reformation & Related Theory	4
___	CSME 1254 Artistry of Hair Design I	2
		<b>15</b>
SECOND SEMESTER		SCH
___	CSME 2401 The Principles of Hair Coloring & Related Theory	4
___	CSME 2410 Advanced Haircutting & Related Theory	4
___	CSME 1255 Artistry of Hair Design II	2
___	CSME 2344 Preparation for the State Licensing Written Examination	3
		<b>13</b>
THIRD SEMESTER		SCH
___	CSME 2337 Advanced Cosmetology Techniques	3
___	• CSME 2441 Preparation for the State Licensing Examination	4
___	CSME 2439 Advanced Hair Design	4
___	CSME 2343 Salon Development	3
		<b>14</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>42</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Cosmetology HS Dual Credit – COHS1

This Certificate Program will provide for 1000 hours of instruction that the High School Dual Credit Student is required to attend. This Program is designed to work with the high school schedule and is to be completed in 2 years. This program will provide students with an opportunity to learn the basic manipulative and theoretical skills necessary to become a licensed cosmetologist.

To earn a certificate, students must successfully complete courses contained in a block unit taught in four semesters.

To be eligible for licensing by the Texas Department of Licensing and Regulation, the students must have completed the following courses of study and must show satisfactory completion of the State Administered Examination.

FIRST SEMESTER	SCH
___ CSME 1505 Fundamentals of Cosmetology	5
___ CSME 1254 Artistry of Hair Design I	2
	<b>7</b>
SECOND SEMESTER	
___ CSME 1410 Introduction to Haircutting & Related Theory	4
___ CSME 1453 Chemical Reformation & Related Theory	4
	<b>8</b>
THIRD SEMESTER	
___ CSME 1255 Artistry of Hair Design II	2
___ CSME 2401 The Principles of Hair Coloring & Related Theory	4
	<b>6</b>
FOURTH SEMESTER	
___ CSME 2410 Advanced Haircutting & Related Theory	4
___• CSME 2441 Preparation for the State Licensing Examination	4
	<b>8</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>29</b>

## Certificate of Completion Cosmetology Student Instructor – SI1

To earn this certificate, students must have a GED or high school diploma, a valid TDLR Cosmetology Operator License, and successfully complete courses contained in a block taught in three semesters.

FIRST SEMESTER	SCH
___ CSME 1435 Orientation to the Instruction of Cosmetology	4
___ CSME 1434 Cosmetology Instructor I	4
	<b>8</b>
SECOND SEMESTER	
___ CSME 2414 Cosmetology Instructor II	4
___ CSME 2415 Cosmetology Instructor III	4
	<b>8</b>
THIRD SEMESTER	
___• CSME 2444 Cosmetology Instructor IV	4
___ CSME 2445 Instructional Theory & Clinic Operation	4
	<b>8</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>24</b>

# CADD and Engineering

## Associate of Applied Science Computer-Aided Drafting and Design Engineering Technology – DT2

The Drafting Technology Program provides training experience in computer-aided drafting. The Associate of Applied Science Degree prepares students for entrance into the drafting profession confident of having received a strong foundation in drafting disciplines and skills.

Note: Students planning to transfer should see a counselor or a faculty advisor for transferable course substitutions.

FIRST SEMESTER	SCH		
___	DFTG 1405	Technical Drafting	4
___	DFTG 1409	Basic Computer-Aided Drafting	4
___	TECM 1349	Technical Math Applications	
		or	
___	DFTG 2417	Descriptive Geometry	3/4
___	----	Drafting Elective – Track I, II, or III	3/4
			<b>14/16</b>
SECOND SEMESTER			
___	----	Drafting Elective – Track I, II, or III	3/4
___	DFTG 2419	Intermediate Computer-Aided Drafting	
___	----	SBS/GOVT/HIST	3
___	ENGL 1301	English Composition I	3
___	----	Creative Arts/LPC	3
			<b>16/17</b>
THIRD SEMESTER			
___	DFTG 2432	Advanced Computer-Aided Drafting	4
___	----	Drafting Elective – Track I, II, or III	3/4
___	----	Drafting Elective – Track I, II, or III	3/4
___	SPCH ----	Communication Area Option	3
			<b>13/15</b>
FOURTH SEMESTER			
___	----	Drafting Elective – Track I, II, or III	3/4
___	----	Drafting Elective – Track I, II, or III	3/4
___	----	LP Sciences/Mathematics	3/4
___	DFTG 2486	Internship - Drafting & Design Technician, General	4
			<b>13/16</b>
<b>Total Semester Credit Hours for Degree</b>			<b>*60/64</b>

\*Students must complete a minimum of 60 hours to be awarded the Associate of Applied Science degree in CADD Engineering Technology.

The following two certificate exit points allow students to seek employment after a concentrated drafting program.

(First semester courses may not be substituted in the Computer- Aided Drafting and Design).

## Certificate of Completion Computer-Aided Drafting and Design – TP1

FIRST SEMESTER	SCH		
___	DFTG 1405	Technical Drafting	4
___	DFTG 1409	Basic Computer-Aided Drafting	4
			<b>8</b>
SECOND SEMESTER			
___	TECM 1349	Technical Math Applications	
		or	
___	DFTG 2417	Descriptive Geometry	3/4
___	DFTG 2419	Intermediate Computer-Aided Drafting	4
			<b>7/8</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>15/16</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Computer-Aided Drafting and Design Advanced Technology – DS1

Students should review the catalog course description to determine specific course prerequisites. Some drafting electives may have another drafting elective as a prerequisite. Students planning to transfer should see a counselor or a faculty advisor for transferable course substitutions.

FIRST SEMESTER			SCH
___	DFTG	1405 Technical Drafting	4
___	DFTG	1409 Basic Computer-Aided Drafting	4
___	TECM	1349 Technical Math Applications	
		or	
___	DFTG	2417 Descriptive Geometry	3/4
			<b>11/12</b>
SECOND SEMESTER			
___	----	---- Drafting Elective – Track I, II, or III	3/4
___	----	---- Drafting Elective – Track I, II, or III	3/4
___	DFTG	2419 Intermediate Computer-Aided Drafting	4
___	DFTG	2432 Advanced Computer-Aided Drafting	4
			<b>14/16</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>25/28</b>

## Field of Specialization – Drafting Electives

Students choosing a specific field of specialization should refer to the following list for drafting elective selection:

### Track I Drafting Electives

Certificate of Completion  
Architectural Construction Technology:

DFTG 1417	Architectural Drafting Residential
DFTG 2428	Architectural Drafting -Commercial
DFTG 2431	Advanced Technology in Architectural Drafting-3D
CNBT 1442	Building Codes and Ordinances
CNBT 1411	Construction Methods and Materials
DFTG 2430	Civil Drafting

### Track II Drafting Electives

Certificate of Completion Mechanical Technology:

DFTG 1433	Mechanical Drafting
DFTG 2435	Advanced Technologies in Mechanical Design and Drafting* (Prerequisite: DFTG 1433)
ENGT 2307	Engineering Materials
MCHN 1302	Print Reading for Machine Trades
MCHN 1438	Basic Machine Shop
INMT 1311	Computer Integrated Manufacturing

### Track III Drafting Electives

Certificate of Completion Process Instrumentation and Electrical Design:

DFTG 2408	Instrumentation Drafting
CETT 1302	Electricity Principles
DFTG 2407	Electrical Drafting
DFTG 2423	Pipe Drafting
INTC 1312	Instrumentation and Safety
INTC 1343	Application of Industrial Automatic Control

\*Indicates a prerequisite of one or more Drafting Electives. Refer to the course description in the Lee College Catalog for all prerequisites required per course.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**



**Certificate of Completion Architectural  
Construction and Building Technology – CMT1**

FIRST SEMESTER			SCH
___	DFTG 1405	Technical Drafting	4
___	DFTG 1409	Basic Computer Aided Drafting	4
___	CNBT 1411	Construction Methods & Materials I	4
___	CNBT 1442	Building Codes & Inspections	4
			<b>16</b>
SECOND SEMESTER			
___	DFTG 2419	Intermediate CAD	4
___	TECM 1349	Technical Math Application	3
			or
___	DFTG 2417	Descriptive Geometry	3/4
___	DFTG 1417	Architectural Drafting-Residential	4
			<b>11/12</b>
THIRD SEMESTER			
___	DFTG 2430	Civil Drafting	3
___	DFTG 2428	Architectural Drafting – Commercial	4
___•	DFTG 2431	Advanced Tech in Architectural Design – 3D	4
			<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>38/39</b>

**Certificate of Completion Mechanical  
Technology – MET1**

FIRST SEMESTER			SCH
___	DFTG 1405	Technical Drafting	4
___	DFTG 1409	Basic Computer – Aided Drafting	4
___	MCHN 1302	Blue Print Reading for Machining Trades	3
___	ENGT 2307	Engineering Materials I	3
			<b>14</b>
SECOND SEMESTER			
___	DFTG 2419	Intermediate Computer – Aided Drafting	4
___	DFTG 1433	Mechanical Drafting	4
___	MCHN 1438	Basic Machine Shop I	4
			<b>12</b>
THIRD SEMESTER			
___	DFTG 2432	Advanced Computer-Aided Drafting	4
___	DFTG 2435	Advanced Technologies in Mechanical Design and Drafting	4
___•	INMT 1311	Computer Integrated Manufacturing	3
			<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>37</b>

## Associate of Applied Science Process Piping Design – PPD2

The Process Pipe Design Program is designed to provide the student with a foundation of theoretical and practical knowledge of the engineering technology field of piping design and the applied skills necessary to begin careers in the industry or to transfer to a university program. This program provides a learning environment where students can interact with state-of-the-art technological equipment and software to gain experience in the application of computer-aided drafting and design software to create, design, and analyze piping systems. Students pursuing the AAS in Process Pipe Design will be prepared for entry-level employment and transfer to a university program. All students will be prepared for life-long learning in the engineering technology field.

The Texas Gulf Coast Workforce Board has designated Pipe Drafters as a High Skill, High Growth Occupation as of July 2008. Pipe drafters are also a targeted job, by Texas Workforce Commission in the Gulf Coast area with projected employment in 2014 to be equal to or greater than the average for all occupations in the region and a projected growth rate equal to or greater than the average in the region. Median hourly wages are equal to or greater than the median for all occupations in the region with a designated minimum education requirement of a post-secondary degree or certificate, long-term on the job training, or experience in a related occupation.

FIRST SEMESTER			SCH
__	DFTG	1409 Basic Computer - Aided Drafting	4
__	DFTG	1405 Technical Drafting	4
__	TECM	1349 Technical Math Applications	3
		or	
__	DFTG	2417 Descriptive Geometry	3/4
__	ENGL	1301 English Composition I	3
			<b>14/15</b>

SECOND SEMESTER			SCH
__	DFTG	2419 Intermediate CAD	4
__	DFTG	2408 Instrumentation Drafting	4
__	ENGT	2307 Engineering Materials I	3
__	----	---- Creative Arts/LPC	3
__	----	---- LP Sciences/Mathematics	3/4
			<b>17/18</b>

THIRD SEMESTER			SCH
__	DFTG	2423 Pipe Drafting - 3D	4
__	DFTG	2432 Advanced Computer-Aided Drafting	4
__	----	---- SBS/GOVT/HIST	3
__	SPCH	---- Communication Area Option	3
			<b>14</b>

FOURTH SEMESTER			SCH
__	DFTG	2445 Advanced Pipe Drafting	4
__	ARCE	2444 Statics and Strength of Materials	4
__	PFPB	2449 Field Measuring, Sketching & Layout	4
__•	DFTG	2457 Advanced Technologies in Pipe Design & Drafting	4
			<b>16</b>
<b>Total Semester Credit Hours for Degree</b>			<b>61/63</b>

## Certificate of Completion Process Piping Design – PPD1

FIRST SEMESTER			SCH
__	DFTG	1409 Basic Computer - Aided Drafting	4
__	DFTG	1405 Technical Drafting	4
			<b>8</b>
SECOND SEMESTER			SCH
__	DFTG	2419 Intermediate CAD	4
__	DFTG	2408 Instrumentation Drafting	4
			<b>8</b>
THIRD SEMESTER			SCH
__	DFTG	2423 Pipe Drafting - 3D	4
__	DFTG	2432 Advanced Computer-Aided Drafting	4
__	PFPB	2449 Field Measuring, Sketching & Layout	4
			<b>12</b>
FOURTH SEMESTER			SCH
__	DFTG	2445 Advanced Pipe Drafting	4
__•	DFTG	2457 Advanced Technologies in Pipe Design & Drafting	4
			<b>8</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>36</b>

## Certificate of Completion Process Instrumentation and Electrical Design – PIED1

The Process Instrumentation and Electrical Design Certificate is designed to provide the student with a foundation of computer-aided drafting and design (CADD) skills in tandem with practical field knowledge of process instrumentation and electrical applications. In addition to the classroom activities, this program provides hands-on interaction with process instrumentation and electrical equipment in the field as a foundation for application of drafting and design projects in the classroom. Students pursuing the Certificate of Completion in Process Instrumentation and Electrical Design will be prepared for entry-level employment in I&E design and have a foundation of courses to apply toward the AAS in CADD Engineering Technology.

FIRST SEMESTER				SCH
—	DFTG	1409	Basic Computer - Aided Drafting	4
—	DFTG	1405	Technical Drafting	4
—	IEIR	1302	Introduction to Direct Current Circuits	3
—	INTC	1312	Instrumentation & Safety	3
				<b>14</b>
SECOND SEMESTER				
—	DFTG	2419	Intermediate CAD	4
—•	DFTG	2408	Instrumentation Drafting	4
—	DFTG	2407	Electrical Drafting	4
—	INTC	1343	Application Industrial Automatic Controls	3
				<b>15</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>29</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

# Education

## Associate of Applied Science Child Development – EDCD2

Students will be prepared for entry-level positions working with young children and their families. A developmental approach is emphasized, which promotes optimal physical, cognitive, social, and emotional growth of children.

FIRST SEMESTER			SCH
__	TECA	1311 Educating Young Children	3
__	CDEC	1319 Child Guidance	3
__	ENGL	1301 English Composition I	3
__	CDEC	1313 Curriculum Resources for Early Childhood Program	3
__	----	----- Elective*	3
			<b>15</b>
SECOND SEMESTER			
__	CDEC	1356 Emergent Literacy for Early Childhood	3
__	CDEC	1359 Children with Special Needs	3
__	----	----- Creative Arts/LPC	3
__	CDEC	1323 Observation and Assessment	3
__	CDEC	2326 Administration of Programs for Young Children I	3
__	----	----- Elective*	3
			<b>18</b>

THIRD SEMESTER			
__	CDEC	2307 Math and Science for Early Childhood	3
__	TECA	1303 Family, School, and Community	3
__	SPCH	---- Communication Area Option	3
__	MATH	1332 Contemporary Math or	
__	MATH	1314 College Algebra	3
__	TECA	1354 Child Growth and Development	3
			<b>15</b>

FOURTH SEMESTER			
__	TECA	1318 Wellness of the Young Child	3
__	CDEC	2328 Administration of Program for Young Children II	3
__	CDEC	2366 Practicum (or Field Experience) – Child Care Provider/Assistant	3
__	----	----- SBS/GOVT/HIST	3
__	----	----- Elective*	3
			<b>15</b>

**Total Semester Credit Hours for Degree 63**

\*If wanting to continue towards a bachelor's degree, core courses are recommended. See counselor for advising.

## Certificate of Completion Child Development Associate Training Marketable Skills – EDCDM1

FIRST SEMESTER			SCH
__	CDEC	1317 Child Development Associate Training I	3
__	CDEC	2322 Child Development Associate Training II	3
__	CDEC	2324 Child Development Associate Training III	3
			<b>9</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>9</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

# Electrical

## Associate of Applied Science Electrical Technology – IE2

FIRST SEMESTER				SCH
___	ELPT	1325	National Electrical Code I	3
___	ELPT	1419	Fundamentals of Electricity I	4
___	TECM	1341	Technical Algebra	3
___	ELPT	2301	Journeyman Electrician Exam Review	3
___	----	----	LP Sciences/Mathematics	3/4
				<b>16/17</b>
SECOND SEMESTER				
___	ELPT	1420	Fundamentals of Electricity II	4
___	ELPT	1455	Electronic Applications	4
___	TECM	1349	Technical Math Applications	3
___	ENGL	1301	English Composition I	
			or	
___	BUSI	1304	Business Report Writing & Correspondence	3
___	----	----	Creative Arts/LPC	3
				<b>17</b>
THIRD SEMESTER				
___	ELPT	2405	Motors & Transformers	4
___	ELPT	2319	Programmable Logic Controllers	3
___	SPCH	1315	Principles of Public Speaking	3
___	----	----	Elective	3
___	ELPT	1445	Commercial Wiring	4
				<b>17</b>
FOURTH SEMESTER				
___•	ELPT	1441	Motor Control	4
___	ELPT	2331	AC/DC Drives	3
___	----	----	SBS/GOVT/HIST	3
___	----	----	Elective	3
___	ELPT	2355	Programmable Logic Controllers II	3
___	----	----	Elective	3/4
				<b>19</b>
<b>Total Semester Credit Hours for Degree</b>				<b>69/71</b>

\*Electrical Studies elective must be chosen from ELPT 1321, 2325, 2380, or others as approved by Lead Instructor.

NOTE: To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

## Certificate of Completion Electrical Technology – IE1

FIRST SEMESTER				SCH
___	ELPT	1325	National Electrical Code I	3
___	ELPT	1419	Fundamentals of Electricity I	4
___	ELPT	----	Elective*	3
___	ELPT	2301	Journeyman Electrician Exam Review	3
				<b>13</b>
SECOND SEMESTER				
___	ELPT	1420	Fundamentals of Electricity II	4
___	ELPT	2331	AC/DC Drives	3
___	ELPT	1455	Electronic Applications	4
___	ELPT	2319	Programmable Logic Controllers	3
				<b>14</b>
THIRD SEMESTER				
___	ELPT	2405	Motors & Transformers	4
___•	ELPT	1441	Motor Control	4
___	ELPT	2355	Programmable Logic Controllers II	3
				<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>38</b>

\*Electrical Studies elective may be chosen from ELPT 1321, 2325, or others as approved by Lead Instructor.

## Certificate of Completion Wiring Installation – EW11

This certificate is an institutional award which allows the student to gain entry level skills as a wireman or electrical apprentice.

FIRST SEMESTER				SCH
___	ELPT	1321	Introduction to Electrical Safety & Tools	3
___	ELPT	1419	Fundamentals of Electricity I	4
				<b>7</b>
SECOND SEMESTER				
___	ELPT	1325	National Electrical Code I	3
___•	ELPT	1445	Commercial Wiring	4
				<b>7</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>14</b>

## **Certificate of Completion Electrical Construction – EC1**

FIRST SEMESTER			SCH
—	ELPT 1321	Introduction to Electrical Safety & Tools	3
—	ELPT 1419	Fundamentals of Electricity I	4
			<b>7</b>
SECOND SEMESTER			
—	ELPT 1325	National Electrical Code I	3
—	ELPT 1411	Basic Electrical Theory	4
			<b>7</b>
THIRD SEMESTER			
—	ELPT 1445	Commercial Wiring	4
—	ELPT 2325	National Electrical Code II	3
			<b>7</b>
FOURTH SEMESTER			
—	ELPT 1451	Electrical Machines	4
			<b>4</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>25</b>

# Game Design

## Associate of Applied Science Game Development Specialist – GADS2

This program is designed to provide a well-rounded, fundamental and application-oriented education focused on the knowledge of existing and new developments in Digital Game Technology. The student will acquire knowledge of the basic digital gaming and simulation industries and markets, and the programming, graphic arts, animation, and storyboarding skills required to create the games. Students will be required to develop necessary teamwork skills to fulfill the capstone requirement. With additional training and experience, individuals can increase their potential for advancement. The skills built within this program can lead not only to jobs in the digital gaming industry, but after work experience in the game industry and completion of a four-year degree in computer science, multimedia animation or art, the student could be qualified for other crossover careers including such career opportunities as: Computer Programmer, Computer Systems Analyst, Software Engineer, Multimedia Artist and Animator, and Graphic Artist.

FIRST SEMESTER			SCH
—	COSC	1301 Introduction to Computing	3
—	GAME	1306 Design & Creation of Games	3
—	GAME	1302 Interactive Storyboarding	3
—	ARTC	1453 Computer Illustration	4
—	COSC	1436 Programming Fundamentals I	4
			<b>17</b>
SECOND SEMESTER			
—	GAME	1301 Computer Ethics	3
—	GAME	1304 Level Design	3
—	GAME	1336 Introduction to 3D Game Modeling (artist)*	
or			
—	COSC	1437 Programming Fundamentals II – (programmer) **	3/4
—	ARTC	2440 Computer Illustration II	4
—	IMED	1445 Interactive Digital Media I	4
			<b>17/18</b>

THIRD SEMESTER			
—	ARTV	1341 3-D Animation I (artist)*	
or			
—	GAME	2344 DirectX Programming (programmer) **	3
—	GAME	2332 Project Development I	3
—	ENGL	1301 English Composition I	3
—	----	---- LP Sciences/Mathematics (artist)*	
or			
—	MATH	1314 College Algebra (programmer) **	3/4
—	----	---- Elective***	3/4
			<b>15/17</b>

FOURTH SEMESTER			
—	SPCH	---- Communication Area Option	3
—	----	---- SBS/GOVT/HIST	3
—	----	---- Creative Arts/LPC	3
—	IMED	2311 Portfolio Development	3
—	GAME	2325 3-D Animation II - Character Setup (artist)*	
or			
—	MATH	1324 Finite Math with Business Applications (programmer) **	3
—	• GAME	2334 Project Development II	3
			<b>18</b>
<b>Total Semester Credit Hours for Degree</b>			<b>67/70</b>

\*Choices for Artist track  
 \*\*Choices for Programmer track  
 \*\*\*Elective to be chosen from ENGL 1302, 2307, GAME 1394, 2386, 2387, 2402, or other course appropriate to degree.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**





# Health Information

## Associate of Applied Science Health Information – MR2

This Tech Prep Degree Program is a professional program which is designed to lead to an Associate of Applied Science Degree.

Prerequisites for the program include a minimum of 12th grade reading level as determined by Lee College Placement Testing. A full-time student can complete the program in two years.

This program is accredited by the Commission on Accreditation of Health Informatics and Information Management (CAHIIM). Students are eligible to apply to take the National Examination to become a Registered Health Information Technician (RHIT).

In the Academic Study Program, students study anatomy and physiology, medical terminology, basic disease processes, medical transcription, record storage and retrieval, medicolegal aspects, quality improvement, data processing, health record science, hospital statistics, and human resource management.

This program offers preparation for a technical area of service in hospitals, clinics, and related health facilities. Students are trained in manual and electronic methods of health record management including record assembly, analysis, coding, abstracting, transcription, filing, and record maintenance. Part of the learning experience will include working in the Health Information Management Department of a hospital or other health care facility. Mastery of the National Examination furthers job opportunities and increases salary.

FIRST SEMESTER				SCH
—	HITT	1305	Medical Terminology I	3
—	ITSC	1309	Integrated Software Applications I	3
				<b>6</b>
SECOND SEMESTER				
—	ENGL	1301	English Composition I	3
—	BIOL	2401	Human Anatomy & Physiology I	4
—	HITT	1349	Pharmacology	3
—	HITT	1301	Health Data Content & Structure	3
—	HITT	1345	Health Care Delivery Systems	3
				<b>16</b>
THIRD SEMESTER				
—	BIOL	2402	Human Anatomy & Physiology II	4
—	MRMT	1307	Medical Transcription I	3
—	HITT	1341	Coding & Classification Systems	3
—	HPRS	2301	Pathophysiology	3
—	PSYC	2301	Introduction to Psychology	3
				<b>16</b>
FOURTH SEMESTER				
—	HITT	2160	Clinical: Health Information/Medical Records Technology/Technician	1
—	SPCH	----	Communication Area Option	3
				<b>4</b>
FIFTH SEMESTER				
—	HITT	1355	Health Care Statistics	3
—	MRMT	2433	Medical Transcription II	4
—	HITT	2260	Clinical - Health Information/ Medical Records Technology/Technician	2
—	HITT	1353	Legal & Ethical Aspects of Health Information	3
—	HITT	2335	Coding & Reimbursement Methodologies	3
				<b>15</b>
SIXTH SEMESTER				
—	HITT	2339	Health Information Organization & Supervision	3
—	HITT	2343	Quality Assessment & Performance Improvement	3
—	HITT	2261	Clinical - Health Information/ Medical	2
—	ENGL	1302	English Composition II	3
—	----	----	Creative Arts/LPC	3
				<b>14</b>
<b>Total Semester Credit Hours for Degree</b>				<b>71</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Medical Transcription – MR1

The Medical Transcription Certificate will qualify students to work as a medical transcriptionist.

Prerequisites for the Certificate Program include a minimum typing speed of 40 wpm and a minimum 12th grade reading level as determined by Lee College Placement Testing. This certificate can be completed in one year by attending full-time.

The Lee College Certificate Program provides approved curriculum medical terminology, medical sciences, composition, and computer skills. A transcription practicum provides for a capstone experience. A voluntary certification examination is administered by the Association for Health Care Documentation Integrity (AHDII), formerly known as the American Association for Medical Transcription (AAMT).

Job opportunities are available in hospitals, clinics, physicians' offices, and a variety of health care facilities, transcription services, as well as self-employment.

FIRST SEMESTER				SCH
—	HITT	1305	Medical Terminology I	3
—	BIOL	2404	The Human Body	4
—	HITT	1349	Pharmacology	3
—	ITSC	1309	Integrated Software Applications I	3
				<b>13</b>
SECOND SEMESTER				
—	MRMT	1307	Medical Transcription I	3
—	ENGL	1301	English Composition I	3
—	POFT	1301	Business English	3
—	POFT	2301	Intermediate Keyboarding	3
				<b>12</b>
THIRD SEMESTER				
—	MRMT	2433	Medical Transcription II	4
—	• MRMT	1167	Practicum (or Field Experience): Medical Transcription/ Transcriptionist	1
—	HITT	1353	Legal & Ethical Aspects of Health Information	3
—	POFT	2312	Business Correspondence & Communication	3
				<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>36</b>

## Certificate of Completion Coding – CD1

The Certificate of Completion in coding will qualify students to work as a Medical Coder.

Prerequisites for the Certificate Program include a minimum 12th grade reading level as determined by Lee College Placement Testing. The Lee College Certificate Curriculum covers coding conventions and principles that allow the learner to sequence codes according to established guidelines and standards, and demonstrate knowledge in reimbursement methodologies. Part of the learning experience includes a clinical. A voluntary certification examination is administered by the American Health Information Management Association (AHIMA).

FIRST SEMESTER				SCH
—	HITT	1305	Medical Terminology I	3
—	ITSC	1309	Integrated Software Applications I	3
—	BIOL	2401	Human Anatomy & Physiology I	4
—	HITT	1301	Health Data Content & Structure	3
				<b>13</b>
SECOND SEMESTER				
—	BIOL	2402	Human Anatomy & Physiology II	4
—	HITT	1341	Coding & Classification Systems	3
—	HPRS	2301	Pathophysiology	3
—	HITT	1349	Pharmacology	3
				<b>13</b>
THIRD SEMESTER				
—	HITT	2335	Coding & Reimbursement Methodologies	3
—	HITT	1353	Legal & Ethical Aspects of Health Information	3
—	• HITT	2161	Clinical – Health Information/ Medical Records Technology/Technician	1
				<b>7</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>33</b>

# Industrial Systems

## Associate of Applied Science Industrial Systems Technician– IS2

Industrial Systems Technology Program trains students for employment in the maintenance, manufacturing, and construction fields and/or the pursuit of an advanced degree, by providing fundamental concepts of machinery installation, repair and troubleshooting.

Graduates of this program will be able to understand and resolve problems that occur in mechanical, fluid power and power transmission systems in the petrochemical, refinery, construction, and maintenance fields.

FIRST SEMESTER	SCH
___ MCHN 1302 Print Reading for Machining Trades	3
___ MCHN 1438 Basic Machine Shop I	4
___ MCHN 1425 Millwright I	4
___ MCHN 1391 Special Topic Machinist/Machine Technologist	3
	<b>14</b>

SECOND SEMESTER	SCH
___ MCHN 1454 Intermediate Machining II	4
___ MCHN 2441 Advanced Machining I	4
___ MCHN 1429 Millwright II	4
___ MCHN 2405 Millwright III	4
	<b>16</b>

THIRD SEMESTER	SCH
___ HYDR 1345 Hydraulics and Pneumatics	3
___ MCHN 2407 Millwright IV	4
___ MCHN 2403 Fundamentals of Computer Numerical Controlled (CNC) Machine Controls	4
___ MCHN 2445 Advanced Machining II	4
___ SPCH ---- Communication Area Option	3
___ ---- ---- SBS/GOVT/HIST	3
	<b>21</b>

FOURTH SEMESTER	SCH
___ MCHN 2412 Millwright V	4
___ ---- ---- LP Sciences/Mathematics	3/4
___ ---- ---- Creative Arts/LPC	3
___ ENGL ---- Communication	3
___• MCHN 1416 Machine Tool Repair or	
___• MCHN 2381 Cooperative Education - Machine Tool Technology/Machinist	3/4
	<b>16/18</b>
<b>Total Semester Credit Hours for Degree</b>	<b>67/69</b>

NOTE: To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Industrial Systems - Machinist – MC1

The IST Millwright certificate prepares students to be able to diagnose and correct the problems that occurs using industry standard practice and procedures.

FIRST SEMESTER		SCH
__	MCHN 1302 Print Reading for Machining Trades	3
__	MCHN 1438 Basic Machine Shop I	4
__	MCHN 1391 Special Topic Machinist/Machine Technologist	3
		<b>10</b>
SECOND SEMESTER		
__	MCHN 1454 Intermediate Machining II	4
__	MCHN 2441 Advanced Machining I	4
		<b>8</b>
THIRD SEMESTER		
__	MCHN 2445 Advanced Machining II	4
__•	MCHN 1416 Machine Tool Repair	
	or	
__•	MCHN 2381 Cooperative Education - Machine Tool Technology / Machinist	3/4
__	MCHN 2403 Fundamentals of Computer Numerical Controlled (CNC) Machine Controls	4
		<b>11/12</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>29/30</b>

## Certificate of Completion Industrial System - Millwright – MW1

The IST Machinist certificate prepares students to be able to manufacture precision parts and/or repair existing parts of mechanical systems.

FIRST SEMESTERS		SCH
__	MCHN 1302 Print Reading for Machining Trades	3
__	MCHN 1425 Millwright I	4
__	MCHN 1391 Special Topic Machinist/Machine Technologist	3
		<b>10</b>
SECOND SEMESTER		
__	MCHN 1429 Millwright II	4
__	MCHN 2405 Millwright III	4
		<b>8</b>
THIRD SEMESTER		
__	HYDR 1345 Hydraulics & Pneumatics	3
__	MCHN 2407 Millwright IV	4
		<b>7</b>
FOURTH SEMESTER		
__•	MCHN 2412 Millwright V	4
		<b>4</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>21</b>

# Instrumentation

## Associate of Applied Science Instrumentation Technology – IR2

FIRST SEMESTER				SCH
__	TECM	1341	Technical Algebra	3
__	INTC	1312	Instrumentation & Safety	3
__	INTC	1307	Instrumentation Test Equipment	3
__	IEIR	1302	Introduction to Direct Current Circuits	3
__	----	----	LP Sciences/Mathematics	3/4
				<b>15/16</b>
SECOND SEMESTER				
__	INTC	1456	Instrumentation Calibration	4
__	RBTC	1301	Programmable Logic Controllers	3
__	TECM	1349	Technical Math Applications	3
__	INTC	1441	Principles of Automatic Control	4
__	BUSI	1304	Business Report Writing and Correspondence	3
				<b>17</b>
THIRD SEMESTER				
__	INTC	2359	Distributed Control Systems	3
__	ITNW	1351	Fundamentals of Wireless LANs	3
__	SPCH	----	Communication Area Option	3
__	CTEC	1401	Applied Petrochemical Technology	4
__	----	----	Elective*	3/4
				<b>16/17</b>
FOURTH SEMESTER				
__	----	----	SBS/GOVT/HIST	3
__	• INTC	2450	Fieldbus Process Control Systems	4
__	----	----	Creative Arts/LPC	3
__	INTC	1343	Application of Industrial Automatic Control	3
__	----	----	Elective*	3/4
				<b>16/17</b>
<b>Total Semester Credit Hours for Degree</b>				<b>64/67</b>

\*Electives to be chosen from INTC 1425, 2405, 2380, or others as approved by Lead Instructor.

NOTE: To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Instrumentation Technology – IR1

FIRST SEMESTER				SCH
__	INTC	1312	Instrumentation & Safety	3
__	INTC	1307	Instrumentation Test Equipment	3
__	IEIR	1302	Introduction to Direct Current Circuits	3
__	CTEC	1401	Applied Petrochemical Technology	4
__	TECM	1341	Technical Algebra	3
				<b>16</b>
SECOND SEMESTER				
__	INTC	1456	Instrumentation Calibration	4
__	RBTC	1301	Programmable Logic Controllers	3
__	TECM	1349	Technical Math Applications	3
__	INTC	1441	Principles of Automatic Control	4
				<b>14</b>
THIRD SEMESTER				
__	INTC	2359	Distributed Control Systems	3
__	• INTC	2450	Fieldbus Process Control Systems	4
__	ITNW	1351	Fundamentals of Wireless LANs	3
__	INTC	1343	Application of Industrial Automatic Control	3
				<b>13</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>43</b>

## Certificate of Completion Industrial Instrumentation – IF1

FIRST SEMESTER				SCH
__	INTC	1305	Introduction to Instrumentation	3
__	INTC	1425	Instrument Hardware Installation I	4
				<b>7</b>
SECOND SEMESTER				
__	INTC	2405	Instrument Hardware Installation II	4
__	CETT	1307	Fundamentals of Electronics	3
__	INTC	1401	Principles of Industrial Measurements I	4
				<b>11</b>
THIRD SEMESTER				
__	• INTC	2410	Principles of Industrial Measurements II	4
				<b>4</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>22</b>

## Certificate of Completion Analytical Instrumentation – AT11

FIRST SEMESTER			SCH
—	TECM 1341	Technical Algebra	3
—	INTC 1312	Instrumentation & Safety	3
—	INTC 1456	Instrumentation Calibration	4
—	EPCT 1349	Environmental Regulation, Interpretation, & Applications	3
—	CTEC 1401	Applied Petrochemical Technology	4
			<b>17</b>
SECOND SEMESTER			
—	INTC 1348	Analytical Instrumentation	3
—	INTC 1441	Principles of Automatic Control	4
—	INTC 2471	Physical Properties Analyzers	4
			<b>11</b>
THIRD SEMESTER			
—	INTC 2472	Sample Systems	4
—	INTC 2445	Advanced Analyzers	4
			<b>8</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>36</b>

## Associate of Applied Science Logistics and Supply Chain Management – LOG2

FIRST SEMESTER			SCH
—	LMGT 1319	Introduction to Business Logistics	3
—	HRPO 1311	Human Relations	3
—	ITSC 1309	Integrated Software Applications	3
—	BMGT 1301	Supervision	3
—	ENGL 1301	Composition I	3
			<b>15</b>
SECOND SEMESTER			
—	LMGT 1323	Domestic and International Transportation Management	3
—	LMGT 1325	Warehousing and Distribution Center Management	3
—	BUSI 1301	Business Principles	3
—	BMGT 1327	Principles of Management	3
—	SPCH 1321	Business and Professional Speech	3
			<b>15</b>

THIRD SEMESTER			
—	LMGT 2330	International Logistics Management	3
—	BMGT 1331	Production and Operations Management	3
—	BMGT 1313	Principles of Purchasing	3
—	MATH 1314	College Algebra	3
—	----	----- Creative Arts/LPC	3
—	----	----- Electives	3
			<b>18</b>
FOURTH SEMESTER			
—	BMGT 1307	Team Building	3
—	ACCT 2401	Principles of Accounting I	4
—	BUSI 2301	Business Law	3
—	----	----- SBS/GOVT/HIST	3
—	• LMGT 1340	Contemporary Logistics Issues or	
—	• LMGT 2388	Internship: Logistics and Materials Management	3
			<b>16</b>
<b>Total Semester Credit Hours for Degree</b>			<b>64</b>

\* Electives CNSE 1311, HMYS 1337, AVIM 1341

## Certificate of Completion Logistics and Supply chain Management – LOG1

FIRST SEMESTER			SCH
—	LMGT 1319	Introduction to Business Logistics	3
—	ITSC 1309	Integrated Software Applications	3
—	BMGT 1301	Supervision	3
—	LMGT 1323	Domestic and International Transportation Management	3
—	LMGT 1325	Warehousing and Distribution Center Management	3
			<b>15</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>15</b>

# Manufacturing Technology

## Associate of Applied Science Manufacturing Engineering Technology – MAET2

The Manufacturing Engineering Technology MET program is a broad-based general science degree designed to prepare students for careers in the chemical processing industry, manufacturing, and advanced technology. The Manufacturing Engineering Technology MET program is a popular option found at fourteen universities in the State of Texas. Graduates from the Manufacturing Engineering Technology MET AAS program would have five optional; (1) transfer to a 4-year engineering program, (2) transfer to a 4-year engineering technology program, (3) seek employment as an engineering technician, (4) seek employment as a process technician, research technician, laboratory technician or (5) transfer to a 4-year school offering a BS in Technology. Graduates from this program will have a solid foundation in mathematics, physics, and chemistry combined with a good understanding of the equipment and technology associated with the operation of the manufacturing industry. Optional career paths could include chemistry, safety, pharmaceuticals, power generation, or engineering. The program will comply with the American Chemical Society's voluntary standards and with the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology in Engineering Technology.

FIRST SEMESTER			SCH
___	PTAC	1302 Introduction to Process Technology	3
___	PTAC	1410 Process Technology I: Equipment	4
___	MATH	1314 College Algebra	3
___	PTAC	1332 Process Instrumentation I	3
___	SCIT	1414 Applied General Chemistry I	4
			<b>17</b>

SECOND SEMESTER			
___	PTAC	1308 Safety, Health & Environment I	3
___	ENGL	---- Communication	3
___	PTAC	2420 Process Technology II: Systems	4
___	PTAC	2314 Principles of Quality	3
___	SCIT	1318 Applied Physics	
		or	
___	----	---- Elective	3
			<b>16</b>

THIRD SEMESTER				
___	PTAC	2346 Process Troubleshooting		3
___	SPCH	---- Communication Area Option		3
___	CHEM	1411 General Chemistry I		4
___	PTAC	2438 Process Technology III: Operations		4
				<b>14</b>

FOURTH SEMESTER				
___	PHYS	1401 College Physics I: Mechanics and Heat		4
___	----	---- Creative Arts/LPC		3
___	----	---- SBS/GOVT/HIST		3
___	CTEC	2445 Unit Operations		4
___	ENGT	2310 Introduction to Manufacturing Processes		
		or		
___	----	---- Elective		3
				<b>17</b>
<b>Total Semester Credit Hours for Degree</b>				<b>64</b>

Approved Program Electives: PTAC 2486 Internship, others approved by Division Chair.

**Note:** Students must complete 50% of technical courses at Lee in order to receive a certificate or AAS degree. The Capstone Experience must be completed at Lee College.

**NOTE:** To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Manufacturing Engineering Technology MAET1

FIRST SEMESTER			SCH
—	PTAC	1302 Introduction to Process Technology	3
—	PTAC	1410 Process Technology I: Equipment	4
—	MATH	1314 College Algebra	3
—	PTAC	1332 Process Instrumentation I	3
—	SCIT	1414 Applied General Chemistry I	4
			<b>17</b>
SECOND SEMESTER			
—	PTAC	2314 Principles of Quality	3
—	PTAC	2420 Process Technology II: Systems	4
—	PTAC	2438 Process Technology III: Operations	4
—	ENGT	2310 Introduction to Manufacturing Processes	3
—	PTAC	1308 Safety, Health & Environment I	3
			<b>17</b>
THIRD SEMESTER			
—	PTAC	2346 Process Troubleshooting	3
—	PHYS	1401 College Physics I: Mechanics and Heat	4
—	CTEC	2445 Unit Operations	4
—	CHEM	1411 General Chemistry I	4
			<b>15</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>49</b>

Note: Students must complete 50% of technical courses at Lee in order to receive a certificate or AAS degree. The CAPSTONE experience must be completed at Lee College.



# Mental Health Services

## Associate of Applied Science Alcohol and Drug Abuse Counseling – CA2

The degree program leads to an Associate of Applied Science Degree in Mental Health Services and prepares students for credentialing as Licensed Chemical Dependency Counselors (LCDCs) and to sit for that competency-based exam. The Prevention Specialist Certificate exceeds state mandated education requirements for credentialing as a Certified Prevention Specialist (CPS) and prepares students to sit for a competency-based exam for that credential. Prerequisite for the programs is a 12th grade reading level. In order to sit for the LCDC exam, students must have a minimum of a two-year degree and at least 270 contact hours (6 courses in alcohol and drug abuse counseling or related courses of 3 credit hours each). In addition, candidates for licensure must have completed at least 300 hours of supervised field work in an approved cooperative education, clinical, or practicum course. The candidate for licensure must also have 4000 hours of experience in substance abuse counseling prior to sitting for the exam. The student is responsible for the 4000 hours of field work. The Certificate of Completion in Substance Abuse Prevention consists of 6 DAAC courses, 3 specifically prevention courses, plus a one hundred hour supervised cooperative education class. After the cooperative education class, the student is candidate for Certified Prevention Specialist credentialing exam.

FIRST SEMESTER			SCH
—	DAAC 1319	Introduction to Alcohol & Other Drug Addictions	3
—	DAAC 1304	Pharmacology of Addiction	3
—	ENGL 1301	English Composition I	3
—	PSYC 2301	Introduction to Psychology	3
—	SOCI 1301	Introductory Sociology	3
			<b>15</b>
SECOND SEMESTER			
—	DAAC 1311	Counseling Theories	3
—	DAAC 1317	Basic Counseling Skills	3
—	ENGL 1302	English Composition II or	
—	ENGL 2311	Technical Writing	3
—	----	SBS/GOVT/HIST	3
—	ITSC 1309	Integrated Software Applications I	3
			<b>15</b>
THIRD SEMESTER			
—	DAAC 1309	Assessment Skill of Alcohol & Other Drug Addictions	3
—	----	LP Sciences/Mathematics	3/4
—	SPCH ----	Communication Area Option	3
—	DAAC 2354	Dynamics of Group Counseling	3
			<b>12/13</b>
FOURTH SEMESTER			
—	----	Elective*	3
—	DAAC 2341	Counseling Alcohol & Other Drug Addictions	3
—	DAAC 2280	Cooperative Education – Substance Abuse/Addiction Counseling	2
—	----	SBS/GOVT/HIST	3
—	----	Creative Arts/LPC	3
			<b>14</b>
FIFTH SEMESTER			
—	DAAC 2343	Current Issues	3
—	DAAC 2307	Addicted Family Intervention	3
—•	DAAC 2281	Cooperative Education – Substance Abuse/Addiction Counseling	2
—	----	Elective*	3
			<b>11</b>
<b>Total Semester Credit Hours for Degree</b>			<b>67/68</b>

\*DAAC 1391 is recommended for one elective.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Alcohol and Drug Abuse Counseling – CA1

Certificate exceeds 270 contact hours required by Texas Commission on Alcohol and Drug Abuse for eligibility to take state test for licensure and TAADAC requirements for certificate.

FIRST SEMESTER	SCH
— DAAC 1319 Introduction to Alcohol & Other Drug Addictions	3
— DAAC 1304 Pharmacology of Addiction	3
— DAAC 1311 Counseling Theories	3
	<b>9</b>
SECOND SEMESTER	
— DAAC 1317 Basic Counseling Skills	3
— DAAC 1309 Assessment Skill of Alcohol and Other Drug Addictions	3
— DAAC 2307 Addicted Family Intervention	3
	<b>9</b>
THIRD SEMESTER	
— DAAC 2354 Dynamics of Group Counseling	3
— DAAC 2343 Current Issues	3
— DAAC 2280 Cooperative Education – Substance Abuse/Addiction Counseling	2
	<b>8</b>
FOURTH SEMESTER	
— DAAC 2341 Counseling Alcohol and Other Drug Addictions	3
—• DAAC 2281 Cooperative Education – Substance Abuse/Addiction Counseling	2
	<b>5</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>31</b>

## Certificate of Completion Substance Abuse Prevention – SAP1

FIRST SEMESTER	SCH
— DAAC 1319 Introduction to Alcohol & Other Drug Addictions	3
— DAAC 1304 Pharmacology of Addiction	3
— DAAC 2306 Substance Abuse Prevention I	3
	<b>9</b>
SECOND SEMESTER	
— DAAC 1317 Basic Counseling Skills	3
— DAAC 2353 Substance Abuse Prevention II	3
— DAAC 1391 Special Topics in Alcohol/Drug Abuse Counseling – Substance Abuse Prevention Issues	3
—• DAAC 1280 Cooperative Education – Substance Abuse/Addiction Counseling	2
	<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>20</b>

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

# Nursing

## Associate of Applied Science Nursing Program – AD2

The purpose of the Associate Degree Nursing Program is to prepare students with beginning competencies to practice as registered nurses upon successful writing of the National Council Licensure Examination for Registered Nurses. The program is accredited by the Texas Board of Nursing and the Accreditation Commission for Education in Nursing, Inc. (ACEN) 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326.

It is recommended that the applicant complete some or all of the general education courses in the curriculum prior to entry into the program. After successful completion of this program, the graduate is eligible to take the National Council Licensure Examination for Registered Nurses. Upon passing the examination, the graduate is licensed as a Registered Nurse.

Job opportunities include hospitals, clinics, home health care facilities, long-term care facilities, industry, and specialty health care hospital units. The registered nurse works within the scope of nursing as defined by the Nursing Practice Act in the State of Texas.

## Associate Degree Nursing (ADN) Program Admission Requirements

Students are required to make application to Lee College before applying to the nursing program. Students are responsible for furnishing official transcript(s) to the Admissions and Records Office. The student is required to request transcript evaluation of transfer courses. Students who have foreign transcripts should plan extended time for transcript evaluation.

Applications will not be accepted without documentation of the state required immunizations and/or titers (contact the Nursing Office or the Counseling Center for an application packet). Applications will be kept on file for one academic year. Applicants interested in maintaining an active application file must notify the nursing office in writing prior to the expiration of one academic year.

Nursing students are required to carry personal health insurance to meet hospital affiliation clinical requirements. A copy of the student's health insurance card will be required to be submitted to the Nursing Office upon invitation into the Nursing program.

Due to requirements of criminal background checks, pre-admission testing and other processes the following application deadlines are required:

### Fall Admission

Applications will be accepted between January 15 and March 15.

### Spring Admission

Applications will be accepted between June 15 and August 15.

Because of academic demands of a curriculum that prepares students for national licensing examinations and performance of safe nursing care in clinical situations, applicants must meet the academic criteria outlined for acceptance into nursing programs at Lee College. Meeting minimum entrance requirements does not guarantee admission. Admission requirements are monitored continuously and may change between catalogs. Contact the Nursing Office for the most current requirements including:

- Preadmission Assessment Examination
  - Hesi A-2 score requirements available in the nursing office
- Overall GPA of 2.7 in degree plan
- No grade less than "C" earned in the degree plan courses
- Prerequisite courses GPA of 2.7 minimum (RNSG 1301, BIOL 2401, ENGL 1301, PSYC 2301)
- Science GPA of 2.5 minimum in degree plan courses completed
- Computer skills competency
  - Students are encouraged to consider ITSC 1309 or equivalent to enhance computer skills if necessary;

### Other areas impacting admission

- Number of degree plan courses completed
- Successful completion of non-degree plan academic courses such as Sociology, History, Government, and Statistics, Chemistry, Biology, Life Science, Pathophysiology and Nutrition
- Previous unsuccessful RN degree plan attempts, at other schools and Lee College, will impact admission
- Repetitive academic courses may impact overall admission scores
- Criminal background checks history. See Nursing Office for details
- Texas Department of Health and Human Services required immunizations and/or titers

Students are required to take a Pre-Admission Assessment Exam. The exam scores will be used by the ADN program for admission, counseling, and progression advisement and decisions. The exam offers study methods which can aid the student with remediation during the course of the nursing program. Required payment is made at the cashier's office, and the receipt submitted to the Nursing Office prior to taking the exam. Exam dates and testing requirements are available in the nursing office.

The Texas Board of Nursing (BON) requires schools to inform enrolled students (verbally and in writing) about eligibility requirements and to maintain students' signed receipt of the required information. Applicants for NCLEX and Nurses seeking licensure in Texas are required to submit a complete and legible set of fingerprints on a form prescribed by the board for the purpose of obtaining a criminal history from the Texas Department of Public Safety and the Federal Bureau of Investigations. (Section 301.252 (b) and Section 301.252 (e) of the Texas Occupations Code). Positive criminal background history may impact admission and/or progression in the nursing program.

All NCLEX applicants with outstanding eligibility issues that could prevent them from taking the NCLEX examination upon completion of a nursing program are urged to complete a Declaratory Order application. The Declaratory Order process permits the Board to make decisions regarding an applicant's eligibility for licensure prior to entering or completing a nursing program. The BON has identified certain circumstances that may render a potential candidate ineligible for licensure as a registered nurse in the state of Texas. The Board provides individuals the opportunity to petition for a Declaratory Order as to their eligibility in accordance with article 4519(a) of the Nursing Practice Act. View [www.bon.state.tx.us](http://www.bon.state.tx.us) for further information and forms.

It is suggested that the \* courses are taken prior to program admission. Once admitted into the program, all courses must be taken in the sequence listed at the time of admission. If any RNSG course must be repeated, the lab/clinical corresponding course must be repeated also.

FIRST SEMESTER PREREQUISITES				SCH
___	BIOL	2401	Human Anatomy & Physiology I	4
___	RNSG	1301	Pharmacology	3
___	ENGL	1301	English Composition I	3
___	PSYC	2301	Introduction to Psychology	3
				<b>13</b>
SECOND SEMESTER				
___	PSYC	2314	Life Span Growth & Development*	3
___	RNSG	1413	Foundations for Nursing Practice	4
___	RNSG	1205	Nursing Skills I	2
___	RNSG	1247	Concepts of Clinical Decision-Making	2
___	RNSG	1261	Clinical -Registered Nursing/ Registered Nurse	2
___	BIOL	2402	Human Anatomy & Physiology II*	4
				<b>17</b>
THIRD SEMESTER				
___	RNSG	1343	Complex Concepts of Adult Health	3
___	RNSG	1362	Clinical-Nursing: Registered Nurse Training	3
___	RNSG	2201	Care of Children & Families	2
___	RNSG	2161	Clinical -Registered Nursing/ Registered Nurse	1
___	BIOL	2421	Microbiology*	4
				<b>13</b>
FOURTH SEMESTER				
___	----	----	Creative Arts/LPC *	3
___	ENGL	1302	English Composition II*	3
___	SPCH	----	Communication Area Option	3
				<b>9</b>
FIFTH SEMESTER				
___	RNSG	1251	Care of the Childbearing Family	2
___	RNSG	1162	Clinical-Nursing: Registered Nurse Training	1
___	RNSG	2213	Mental Health Nursing	2
___	RNSG	2160	Clinical -Registered Nursing/ Registered Nurse	1
				<b>6</b>
SIXTH SEMESTER				
___	RNSG	2432	Enhanced Concepts of Adult Health	4
___	RNSG	2263	Clinical -Registered Nursing/ Registered Nurse	2
___	RNSG	2221	Professional Nursing: Leadership & Management	2
				<b>8</b>
<b>Total Semester Credit Hours for Degree</b>				<b>66</b>

**Notes:**

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

Students are encouraged to consider taking Healthcare Spanish. SPNL1301 Health Care Spanish develops the practical Spanish communication skill for healthcare employees including medical terminology, greetings, common expressions, commands, and phrases normally used within a hospital or physician's office.

## **Associate of Applied Science Nursing – Transitional Entry – TN2**

Students are required to make application to Lee College before applying to the nursing program. Students are responsible for furnishing official transcript(s) to the Admissions and Records Office. The student is required to request transcript evaluation of transfer courses. Students who have foreign transcripts should plan extended time for transcript evaluation.

Applications will not be accepted without documentation of the state required immunizations and/or titers (contact the Nursing Office or the Counseling Center for an application packet). Applications will be kept on file for one academic year. Applicants interested in maintaining an active application file must notify the nursing office in writing prior to the expiration of one academic year.

Nursing students are required to carry personal health insurance to meet hospital affiliation clinical requirements. A copy of the student's health insurance card will be required to be submitted to the Nursing Office upon invitation into the Nursing program.

Due to requirements of criminal background checks, pre-admission testing and other processes the following application deadlines are required:

### **Fall Admission**

Applications will be accepted between March 15 and May 15.

### **Spring Admission**

Applications will be accepted between August 15 and October 15.

Because of academic demands of a curriculum that prepares students for national licensing examinations and performance of safe nursing care in clinical situations, applicants must meet the academic criteria outlined for acceptance into nursing programs at Lee College. Meeting minimum entrance requirements does not guarantee admission. Admission requirements are monitored continuously and may change between catalogs. Contact the Nursing Office for most current requirements including:

- Texas Vocational Nursing License in good standing
- Comprehensive Standardized Examination
  - o VN Comprehensive Standardized Examination (HESI) with a score of 900 or higher within the previous 2 years. Students who have not taken the HESI VN Comprehensive Standardized Examination within the last two years or who have not demonstrated a score of 900 or higher should apply in the nursing office to take the standardized exam.
  - o Copies of scores from other schools may be submitted for review through a transcript request process with HESI (Evolve/Elsevier).
- Preadmission Assessment Examination
  - o Score requirements available in the nursing office
  - o Math competency must be demonstrated
- Overall GPA of 2.7 in degree plan
- No grade less than "C" earned in the degree plan courses
- Prerequisite courses GPA of 2.7 minimum (BIOL 2401, ENGL 1301, PSYC 2301)
- Science GPA of 2.5 minimum in degree plan courses completed
- Computer skills competency
  - o Students are encouraged to consider ITSC 1309 or equivalent to enhance computer skills if necessary

### **Other areas impacting admission**

- Number of degree plan courses completed
- Successful completion of non-degree plan academic courses such as Sociology, History, Government, and Statistics, Chemistry, Biology, Life Science, Pathophysiology and Nutrition
- Previous unsuccessful RN degree plan attempts, at other schools and Lee College, will impact admission
- Repetitive academic courses may impact overall admission scores
- Criminal background checks history. See Nursing Office for details
- Texas Department of Health and Human Services required immunizations and/or titers

Students are required to take a Pre-Admission Assessment Exam. The exam scores will be used by the ADN program for admission, counseling, and progression advisement and decisions. The exam offers study methods which can aid the student with remediation during the course of the nursing program. Required payment is made at the cashier's office, and the receipt submitted to the Nursing Office prior to taking the exam. Exam dates and testing requirements are available in the nursing office.

The Texas Board of Nursing (BON) requires schools to inform enrolled students (verbally and in writing) about eligibility requirements and to maintain students' signed receipt of the required information. Applicants for NCLEX and Nurses seeking licensure in Texas are required to submit a complete and legible set of fingerprints on a form prescribed by the board for the purpose of obtaining a criminal history from the Texas Department of Public Safety and the Federal Bureau of Investigations. (Section 301.252 (b) and Section 301.252 (e) of the Texas Occupations Code). LVN with a current license in the state of Texas may not be required to complete the fingerprinting component of the criminal background check process. Positive criminal background history may impact admission and/or progression in the nursing program.

All NCLEX applicants with outstanding eligibility issues that could prevent them from taking the NCLEX examination upon completion of a nursing program are urged to complete a Declaratory Order application. The Declaratory Order process permits the Board to make decisions regarding an applicant's eligibility for licensure prior to entering or completing a nursing program. The BON has identified certain circumstances that may render a potential candidate ineligible for licensure as a registered nurse in the state of Texas. The Board provides individuals the opportunity to petition for a Declaratory Order as to their eligibility in accordance with article 4519(a) of the Nursing Practice Act. View [www.bon.state.tx.us](http://www.bon.state.tx.us) for further information and forms.

### Transitional Entry Prerequisites:

All academic courses with the exception of Creative Arts/LPC and Oral Communication must be completed for the student to be eligible for admission to RNSG 2207. It is suggested that the \* courses are taken prior to program admission. Once admitted into the program, all courses must be taken in the sequence listed at the time of admission. If any RNSG course must be repeated, the lab/clinical corresponding course must be repeated also.

FIRST SEMESTER				SCH
—	BIOL	2401	Human Anatomy & Physiology I	4
—	ENGL	1301	English Composition I	3
—	PSYC	2301	Introduction to Psychology	3
				<b>10</b>
SECOND SEMESTER				
—	BIOL	2402	Human Anatomy & Physiology II	4
—	ENGL	1302	English Composition II	3
—	PSYC	2314	Life Span Growth & Development	3
—	----	----	Creative Arts/LPC *	3
—	SPCH	----	Communication Area Option*	3
				<b>16</b>
THIRD SEMESTER				
—	BIOL	2421	Microbiology	4
—	RNSG	1413	Foundations for Nursing Practice #	4
—	RNSG	1205	Nursing Skills I#	2
—	RNSG	1247	Concepts of Clinical Decision-Making #	2
—	RNSG	1261	Clinical -Registered Nursing/ Registered Nurse	2
—	RNSG	2207	Adaptation to Role of Professional Nurse	2
				<b>16</b>

#### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

FOURTH SEMESTER			SCH
—	RNSG 1343	Complex Concepts of Adult Health ##	3
—	RNSG 1362	Clinical- Nursing: Registered Nurse Training ##	3
—	RNSG 2201	Care of Children & Families ##	2
—	RNSG 2161	Clinical -Registered Nursing/ Registered Nurse ##	1
			<b>9</b>
FIFTH SEMESTER			
—	RNSG 1251	Care of the Childbearing Family	2
—	RNSG 1162	Clinical-Nursing: Registered Nurse Training	1
—	RNSG 2213	Mental Health Nursing	2
—	RNSG 2160	Clinical -Registered Nursing/ Registered Nurse	1
			<b>6</b>
SIXTH SEMESTER			
—	RNSG 2432	Enhanced Concepts of Adult Health I	4
—	RNSG 2263	Clinical -Registered Nursing/ Registered Nurse	2
—•	RNSG 2221	Professional Nursing: Leadership & Management	2
			<b>8</b>
<b>Total Semester Credit Hours for Degree</b>			<b>65</b>

## Bachelor of Science Nursing Program

Lee College does not grant nursing baccalaureate degrees; however, our students' articulation into Lamar University RN-BSN track is facilitated. Students interested in the Lamar RN-BSN track upon completion of Lee's ADN program should contact <http://dept.lamar.edu/cde>. In addition, Lee College also maintains a long standing articulation agreement with the University of Texas Health Science Center – Houston for RN-BSN education for our ADN graduates. See the Nursing Admission Office for more information on current RN-BSN articulation agreements.

\*These concepts may be taken after admission to the program.

#Credit awarded upon completion of RNSG 1343, 1362, 2201, and 2161.

##Credit is given for RNSG 1205, 1247, 1261, 1413.

Students are encouraged to consider taking Healthcare Spanish. SPNL1301 Health Care Spanish develops the practical Spanish communication skill for healthcare employees including medical terminology, greetings, common expressions, commands, and phrases normally used within a hospital or physician's office.

# Nursing VN

## Certificate of Completion Vocational Nursing – VN1

The purpose of the Vocational Nursing Program is to prepare individuals to use a systematic problem-solving process to function within the nurse's legal and ethical scope of practice while safely providing quality care and demonstrate the Differentiated Essential Competencies of Graduates of Texas Nursing Programs (DECs). The Vocational Nursing Program is accredited by Texas Board of Nursing (BON).

Admission to the Vocational Nursing Program is based on accrual of points for meeting the following requirements within the stated time frame:

### Requirements

- Applying for admission to Lee College and submitting an official transcript to the Admissions and Records Office from all colleges attended. An official high school transcript or GED certificate must be sent as well.
- Completing a VN Program application in the Nursing Office.
- Completion of the criminal background process as required by the Texas Board of Nursing (information available in the nursing admission's office)
- Submitting a copy of high school diploma or GED certificate to the Nursing Office.
- Submitting a VN program degree plan form signed by a Lee College Counselor to the Nursing Office.
- Submitting a statement of documented reading level after evaluation completed in Counseling Center.
- Completing Lee College assessment/placement tests and developmental courses, if required.
- Demonstrating competencies in Allied Health Math 350 (formerly 210) or "C" or better on advance placement test for MATH 350.
- Attending mandatory information session with VN faculty member.
- Other pre-admission activity as outlined in the VN application packet

### Other areas impacting admission

See the Nursing Office for more information.

- BIOL 2404: Human Body: no older than 5 years, "B" or better is required. (If this course is taken prior to entering the VN program, the student will not have to take BIOL 2404, which is required during the fall semester of the VN program).
- or
- BIOL 2401 and BIOL 2402: no older than 5 years, "B" or better is required. (If these courses are taken prior to entering the VN program, the student will not have to take BIOL 2404 which is required during the fall semester of the VN program).
- HITT 1305: Medical Terminology I. (If this course is taken prior to entering the VN program, the student will not have to take HITT 1305 which is required during the spring semester of the VN program).
- LSSS 300: Learning Strategies Skills
- ITSC 1309: Integrated Software Applications I or COSC 1301: Intro to Computing
- GPA (based on BIOL 2404 or BIOL 2401 and 2402, MATH 350 and HITT 1305) - (4.0=1 point; 3.9-3.0=.75 point; 2.9-2.0=.50 points).

Nursing students are required to carry personal health insurance to meet hospital affiliation clinical requirements. A copy of the student's health insurance card will be required to be submitted to the Nursing Office upon invitation into the Nursing program.

Applications are accepted between February 1 and April 1. The application submission deadline is April 1 for fall entry. A VN admission packet may be obtained in the Nursing Office or the Counseling Center.

Because of academic demands of a curriculum that prepares students for national licensing examination and performance of safe nursing care in clinical situations, applicants must meet the academic criteria outlined for acceptance into nursing programs at Lee College. Meeting minimum entrance requirements does not guarantee admission to the nursing program.

After successful completion of this program, the graduate is eligible to take the National Council Licensure Examination for Practical Nurses. Upon passing the examination, the graduate is licensed as a vocational nurse.



The BON requires schools to inform enrolled students (verbally and in writing) about eligibility requirements and to maintain students' signed receipt of the required information. The Board of Nursing has identified certain circumstances that may render a potential candidate ineligible for licensure as a registered nurse in the State of Texas. The Board provides individuals the opportunity to petition for a Declaratory Order as to their eligibility in accordance with article 4519(a) of the Nursing Practice Act. View [www.bon.state.tx.us](http://www.bon.state.tx.us) for further information and forms.

FIRST SEMESTER			SCH
___	VNSG 1423	Basic Nursing Skills	4
___	VNSG 1304	Foundations of Nursing	3
___	VNSG 1331	Pharmacology	3
___	VNSG 1227	Essentials of Medication Administration	2
___	BIOL 2404	The Human Body	4
___	VNSG 1161	Clinical - Licensed Practical/ Vocational Nurse Training	1
			<b>17</b>
SECOND SEMESTER			
___	HITT 1305	Medical Terminology I	3
___	VNSG 1226	Gerontology	2
___	VNSG 1429	Medical - Surgical Nursing I	4
___	VNSG 1234	Pediatrics	2
___	VNSG 1432	Medical – Surgical Nursing II	4
___	VNSG 1360	Clinical – Licensed Practical/ Vocational Nurse Training	3
			<b>18</b>
THIRD SEMESTER			
___	VNSG 1330	Maternal – Neonatal Nursing	3
___	VNSG 1219	Leadership & Professional Development	2
___	VNSG 2431	Advanced Nursing Skills	4
___	VNSG 2361	Clinical – Licensed Practical/ Vocational Nurse Training	3
			<b>12</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>47</b>

**Notes:**

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

# Paralegal

## Associate of Applied Science Paralegal Studies – PA2

Paralegals (also called “Legal Assistants”) work under the supervision of an attorney and assist in the delivery of legal services. They do substantive legal work the supervising attorney would otherwise do; however, paralegals are not attorneys. Paralegals generally may not provide legal services directly to the public, except as permitted by law. Paralegals are important members of the legal service team. They perform such functions as interviewing clients and witnesses, drafting legal documents, conducting legal research, and attending depositions and court hearings.

Paralegals are found in a number of work settings, including law offices, government agencies, and corporate offices. This program is approved by the American Bar Association.

It consists of both legal and general education courses. It is intended for the training of paralegals and is not a pre-law course of study.

FIRST SEMESTER				SCH
__	ENGL	1301	English Composition I	3
__	POFI	1401	Computer Applications I	4
__	LGLA	1307	Introduction to Law & the Legal Professions	3
__	LGLA	1301	Legal Research & Writing	3
__	LGLA	1355	Family Law	3
				<b>16</b>
SECOND SEMESTER				
__	SPCH	1315	Principles of Public Speaking	3
__	----	----	Creative Arts/LPC	3
__	ENGL	1302	English Composition II	3
__	LGLA	1353	Wills, Trusts & Probate Administration	3
__	LGLA	1351	Contracts	3
__	LGLA	1345	Civil Litigation	3
				<b>18</b>
THIRD SEMESTER				
__	GOVT	2305	Federal Government	3
__	LGLA	2303	Torts & Personal Injury Law	3
__	LGLA	1219	Paralegal Ethics	2
__	LGLA	2309	Real Property	3
__	POFT	1309	Administrative Office Procedures I	3
__	POFT	2301	Immediate Keyboarding	3
				<b>17</b>

## FOURTH SEMESTER

__	----	----	LP Sciences/Mathematics	3/4
__	ACNT	1303	Introduction to Accounting I	
				or
__	BUSI	1307	Personal Finance	3
__	LGLA	----	Elective+	3
__	LGLA	----	Elective+	3
__•	LGLA	2333	Advanced Legal Document Preparation	
				or
__•	LGLA	2389	Internship - Legal Assistant/ Paralegal	3
__	POFT	1132	Workplace Diversity	1

**16/17**

**Total Semester Credit Hours for Degree 67/68**

+Legal elective to be chosen from LGLA 1317, 1343, 2307, 2311, 2313, 2323, 2331, 2337, or 2388.

## Certificate of Completion Paralegal Studies – PA1

Prerequisite: Baccalaureate degree or junior standing in a baccalaureate degree program with a minimum of 18 semester hours of general education classes completed.

FIRST SEMESTER				SCH
__	LGLA	1301	Legal Research & Writing*	3
__	LGLA	1307	Introduction to Law & the Legal Professions	3
__	LGLA	1355	Family Law*	3
__	LGLA	1219	Paralegal Ethics	2
				<b>11</b>
SECOND SEMESTER				
__	LGLA	1345	Civil Litigation*	3
__	LGLA	1351	Contracts	3
__	LGLA	1353	Wills, Trusts & Probate Administration*	3
__	LGLA	----	Elective	3
				<b>12</b>
THIRD SEMESTER				
__	LGLA	2303	Torts & Personal Injury Law	3
__	LGLA	2309	Real Property*	3
__•	LGLA	2333	Advanced Legal Document Preparation©*	3
				<b>9</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>32</b>

©Capstone course must be taken in the last semester of course work.

\*Legal specialty course.

### NOTE: Paralegal Studies Program

The Paralegal Studies Program, in compliance with Guidelines of the American Bar Association, requires students to complete 18 semester credit hours of legal specialty courses, as defined by the ABA, at Lee College.

# Pipefitting

## Associate of Applied Science Pipefitting Technology - PF2

FIRST SEMESTER				SCH
__	PFPB	1350	Plumbing & Pipefitting Equipment and Safety	3
__	PFPB	1408	Basic Pipefitting Skills	4
__	TECM	1349	Technical Math Applications	3
__	ITSC	1309	Integrated Software Applications I	3
__	----	----	LP Sciences/Mathematics	3/4
				<b>16/17</b>
SECOND SEMESTER				
__	SPCH	----	Communication Area Option	3
__	PFPB	1305	Basic Blueprint Reading for Pipefitters	3
__	PFPB	2407	Pipe Fabrication & Installation I	4
__	ENGL	----	Communication	3
__	----	----	Creative Arts/LPC	3
				<b>16</b>
THIRD SEMESTER				
__	PFPB	2408	Piping Standards & Materials	4
__	PFPB	2310	Intermediate Blueprint Reading for Pipefitters	3
__	PFPB	2441	Pipe Fabrication & Installation II	4
__	BMGT	1307	Team Building	3
__	----	----	Elective	3
				<b>17</b>
FOURTH SEMESTER				
__	PFPB	2343	Advanced Pipe Practices	3
__	----	----	SBS/GOVT/HIST	3
__	PFPB	2449	Field Measuring, Sketching & Layout	4
__	----	----	Elective	3
				<b>13</b>
<b>Total Semester Credit Hours for Degree</b>				<b>62/63</b>

**NOTE:** To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Pipefitting Technology – PF1

FIRST SEMESTER				SCH
__	PFPB	1350	Plumbing & Pipefitting Equipment and Safety	3
__	PFPB	1408	Basic Pipefitting Skills	4
				<b>7</b>
SECOND SEMESTER				
__	PFPB	1305	Basic Blueprint Reading for Pipefitters	3
__	PFPB	2407	Pipe Fabrication & Installation I	4
				<b>7</b>
THIRD SEMESTER				
__	PFPB	2408	Piping Standards & Materials	4
__	PFPB	2310	Intermediate Blueprint Reading for Pipefitters	3
__	PFPB	2441	Pipe Fabrication & Installation II	4
				<b>11</b>
FOURTH SEMESTER				
__	PFPB	2343	Advanced Pipe Practices	3
				<b>3</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>28</b>

## Certificate of Completion Pipefitter Helper – PH1

FIRST SEMESTER				SCH
__	PFPB	1350	Plumbing & Pipefitting Equipment and Safety	3
__	PFPB	1408	Basic Pipefitting Skills	4
				<b>7</b>
SECOND SEMESTER				
__	PFPB	1305	Basic Blueprint Reading for Pipefitters	3
__	PFPB	2407	Pipe Fabrication & Installation I	4
				<b>7</b>
THIRD SEMESTER				
__	PFPB	2310	Intermediate Blueprint Reading for Pipefitters	3
				<b>3</b>
<b>Total Semester Credit Hours for Certificate</b>				<b>17</b>

# Process Technology

## Associate of Applied Science Process Technology – PT2

The Process Technology Programs prepare the student to enter the operations or laboratory technician field in refinery and manufacturing.

FIRST SEMESTER	SCH
— PTAC 1302 Introduction to Process Technology	3
— PTAC 1410 Process Technology I – Equipment	4
— TECM - - - - Technical Math or	
— MATH - 3 - - Math	3
— PTAC 1332 Process Instrumentation I	3
— SCIT 1414 Applied General Chemistry I	4
	<b>17</b>

SECOND SEMESTER	SCH
— ENGL - - - - Communication	3
— PTAC 1308 Safety, Health, & Environment I	3
— PTAC 2420 Process Technology II – Systems	4
— - - - - SBS/GOVT/HIST	3
— SCIT 1318 Applied Physics or	
— - - - - - 3 - - Approved Electives*	3
	<b>16</b>

THIRD SEMESTER	SCH
— SPCH - - - - Communication Area Option	3
— PTAC 2314 Principles of Quality	3
— PTAC 2438 Process Technology III – Operations	4
— PTAC 2346 Process Troubleshooting	3
— CHEM 1419 Introductory Organic Chemistry	4
	<b>17</b>

FOURTH SEMESTER	SCH
— - - - - - - - Creative Arts/LPC	3
— PHYS - 4 - - Physics Selection	4
—• CTEC 2445 Unit Operations	4
— ENGT 2310 Introduction to Manufacturing Processes or	
— - - - - - 3 - - Approved Electives*	3
	<b>14</b>

**Total Semester Credit Hours for Degree 64**

\* Approved Electives: Technical electives include: PTAC 2486 Internship others approved by Division Chair.

**Note:** Students must complete 50% of technical courses at Lee in order to receive a certificate or AAS degree. The Capstone Experience must be completed at Lee College.

**NOTE:** To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

## Certificate of Completion Process Technology – PT1

FIRST SEMESTER	SCH
— PTAC 1302 Introduction to Process Technology	3
— PTAC 1410 Process Technology I: Equipment	4
— TECM - - - - Technical Math or	
— MATH - - - - Math	3
— PTAC 1332 Process Instrumentation I	3
— SCIT 1414 Applied General Chemistry	4
	<b>17</b>

SECOND SEMESTER	SCH
— PTAC 2314 Principles of Quality	3
— PTAC 2420 Process Technology II - Systems	4
— SCIT 1318 Applied Physics or	
— - - - - - 3 - - Approved Electives*	3
— PTAC 1308 Safety, Health, & Environment I	3
	<b>13</b>

THIRD SEMESTER	SCH
— PTAC 2346 Process Troubleshooting	3
— PTAC 2438 Process Technology III - Operations	4
— ENGT 2310 Introduction to Manufacturing Processes or	
— - - - - - 3 - - Approved Electives*	3
—• CTEC 2445 Unit Operations	4
	<b>14</b>

**Total Semester Credit Hours for Certificate 44**

\* Approved Electives: Technical electives include: PTAC 2486 Internship others approved by Division Chair.

**Note:** Students must complete 50% of technical courses at Lee in order to receive a certificate or AAS degree. The Capstone Experience must be completed at Lee College.

# Professional Administrative

## Associate of Applied Science Administrative Technology – OT2

The Administrative Technology Program prepares students for administrative support careers in today's businesses. Curriculum is designed to enhance and improve students' administrative skills and develop proficiency using various skills and software programs. Attention is also focused on helping students improve and gain confidence in essential verbal and written communications skills, problems solving skills, as well as business math.

FIRST SEMESTER			SCH
—	POFI	1401 Computer Applications I	4
—	POFT	1309 Administrative Office Procedures I	3
—	POFT	1325 Business Math Using Technology	3
—	POFT	1127 Introduction to Keyboarding or	
—	POFT	1132 Workplace Diversity*	1
—	POFT	1329 Beginning Keyboarding or	
—	POFT	2203 Speed & Accuracy Building	2/3
—	----	---- Creative Arts/LPC	3
			<b>16/17</b>

SECOND SEMESTER			SCH
—	ENGL	1301 English Composition I	3
—	POFT	2301 Intermediate Keyboarding	3
—	POFT	1349 Administrative Office Procedures II or	
—	POFT	1366 Practicum (or Field Experience) – General Office Occupations & Clerical Services	3
—	POFT	1301 Business English	3
—	----	---- SBS/GOVT/HIST	3
			<b>15</b>

THIRD SEMESTER			SCH
—	ENGL	2311 Technical Writing	3
—	POFI	1441 Computer Applications II	4
—	POFI	2331 Desktop Publishing or	
—	POFT	2366 Practicum (or Field Experience) – General Office Occupations & Clerical Services	3
—	POFT	2312 Business Correspondence & Communication	3
—	SPCH	---- Communication Area Option	3
			<b>16</b>

FOURTH SEMESTER			SCH
—	----	---- LP Sciences/Mathematics	3/4
—	POFT	2331 Administrative Systems	3
—	POFI	1349 Spreadsheets	3
—	ACNT	1303 Introduction to Accounting I	3
—	POFI	2340 Advanced Word Processing	3
			<b>15/16</b>
<b>Total Semester Credit Hours for Degree</b>			<b>62/64</b>

\*Administrative Technology major should enroll in POFT 1132.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

## Certificate of Completion Administrative Technology I, II, and III

All courses in each certificate apply toward the next level certificate and must be completed for each level certificate to be awarded.

The ability to type 30-35 words per minute is recommended for POFT 2301; POFT 1329 should be taken before taking this course if the student's typewriting speed is less than 30 words per minute.

### Certificate of Completion Administrative Technology I – OA1

FIRST SEMESTER			SCH
___	•	POFT 1309 Administrative Office Procedures I	3
___		POFT 1329 Beginning Keyboarding	
		or	
___		POFT 2203 Speed & Accuracy Building	2/3
___		POFI 1401 Computer Applications I	4
___		POFT 1325 Business Math Using Technology	3
___		POFT 1301 Business English	3
			<b>15/16</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>15/16</b>

### Certificate of Completion Administrative Technology II – AA1

FIRST SEMESTER			SCH
___	•	POFT 1309 Administrative Office Procedures I	3
___		POFT 1329 Beginning Keyboarding	
		or	
___		POFT 2203 Speed & Accuracy Building	2/3
___		POFI 1401 Computer Applications I	4
___		POFT 1325 Business Math Using Technology	3
___		POFT 1301 Business English	3
			<b>15/16</b>

SECOND SEMESTER			SCH
___		POFT 2312 Business Correspondence & Communication	3
___		POFI 1441 Computer Applications II	4
___	•	POFT 1349 Administrative Office Procedures II	
		or	
___	•	POFT 1366 Practicum (or Field Experience) – General Office Occupations & Clerical Services	3
___		POFT 1132 Workplace Diversity	1
___		POFT 2301 Intermediate Keyboarding	3
			<b>14</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>29/30</b>

## Certificate of Completion Administrative Technology III – O21

FIRST SEMESTER			SCH
___	•	POFT 1309 Administrative Office Procedures I	3
___		POFT 1329 Beginning Keyboarding	
		or	
___		POFT 2203 Speed & Accuracy Building	2/3
___		POFI 1401 Computer Applications I	4
___		POFT 1325 Business Math Using Technology	3
___		POFT 1301 Business English	3
			<b>15/16</b>

SECOND SEMESTER			SCH
___		POFT 2312 Business Correspondence & Communication	3
___		POFI 1441 Computer Applications II	4
___	•	POFT 1349 Administrative Office Procedures II	
		or	
___	•	POFT 1366 Practicum (or Field Experience) – General Office Occupations & Clerical Services	3
___		POFT 1132 Workplace Diversity	1
___		POFT 2301 Intermediate Keyboarding	3
			<b>14</b>

THIRD SEMESTER			SCH
___	•	POFT 2331 Administrative Systems	3
___		POFI 2331 Desktop Publishing	
		or	
___		POFT 2366 Practicum (or Field Experience) – General Office Occupations & Clerical Services	3
___		POFI 1349 Spreadsheets	3
___		POFI 2340 Advanced Word Processing	3
			<b>12</b>
<b>Total Semester Credit Hours for Certificate</b>			<b>41/42</b>

# Safety Management

## Associate of Applied Science Safety Management Technology – SM2

This program prepares the students to enter the workplace as HAZMET maintenance technicians, occupational health and safety specialists, chemical safety technicians, inspectors, or quality control technicians.

FIRST SEMESTER		SCH
___	OSHT 1301 Introduction to Safety & Health	3
___	OSHT 1309 Physical Hazards Control	3
___	OSHT 1313 Accident Prevention, Inspection & Investigation	3
___	TECM 1341 Technical Algebra or	
___	TECM 1349 Technical Math Applications	3
___	SCIT 1414 Applied General Chemistry I	4
		<b>16</b>
SECOND SEMESTER		
___	OSHT 1316 Material Handling	3
___	OSHT 1321 Fire Protection Systems	3
___	PTAC 2314 Principles of Quality	3
___	OSHT 2309 Safety Program Management	3
___	OSHT 2401 OSHA Regulations – General Industry	4
		<b>16</b>
THIRD SEMESTER		
___	BMGT 1301 Supervision	3
___	SPCH ---- Communication Area Option	3
___	---- ---- Technical Elective	3
___	---- ---- Creative Arts/LPC	3
___	---- ---- SBS/GOVT/HIST	3
		<b>15</b>
FOURTH SEMESTER		
___	BMGT 1307 Team Building	3
___	ENGL ---- Communication	3
___	PTAC -3 -- Technical Elective	3
___	---- -4 -- LP Sciences/Mathematics	4
		<b>13</b>
<b>Total Semester Credit Hours for Degree</b>		<b>60</b>

Approved Program Electives: PTAC, BMGT, others approved by Division Chair.

**Note:** Students must complete 50% of technical courses at Lee in order to receive a certificate or AAS degree. The Capstone Experience must be completed at Lee College.

**NOTE:** To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

## Certificate of Completion Safety Management Technology – SM1

FIRST SEMESTER		SCH
___	OSHT 1301 Introduction to Safety & Health	3
___	OSHT 1309 Physical Hazards Control	3
___	OSHT 1313 Accident Prevention, Inspection & Investigation	3
___	TECM 1341 Technical Algebra or	
___	TECM 1349 Technical Math Applications	3
___	SCIT 1414 Applied General Chemistry I	4
		<b>16</b>
SECOND SEMESTER		
___	OSHT 1316 Material Handling	3
___	OSHT 1321 Fire Protection Systems	3
___	PTAC 2314 Principles of Quality	3
___	OSHT 2309 Safety Program Management	3
___	OSHT 2401 OSHA Regulations – General Industry	4
		<b>16</b>
THIRD SEMESTER		
___	BMGT 1301 Supervision	3
___	BMGT 1307 Team Building	3
___	PTAC -3 -- Technical Elective	3
___	---- -4 -- Technical Elective	4
___	SCIT 1318 Applied Physics	3
		<b>16</b>
<b>Total Semester Credit Hours for Certificate</b>		<b>48</b>

Approved Program Electives: PTAC, BMGT, others approved by Division Chair.

**Note:** Students must complete 50% of technical courses at Lee in order to receive a certificate or AAS degree. The Capstone Experience must be completed at Lee College.

### Notes:

- Students should plan to take indicated capstone course in their last semester and should speak with their advisor prior to registering for the final semester.

**Core curriculum courses are shown in bold type. If a particular course is not specified, refer to Core Curriculum Options on page. 60.**

# Welding

## Associate of Applied Science Welding Technology – WE2

FIRST SEMESTER	SCH
___ WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)	4
___ WLDG 1313 Introduction to Blueprint Reading for Welders	3
___ TECM 1341 Technical Algebra	3
___ ENGL ---- Communication	3
___ WLDG 1323 Welding Safety, Tools & Equipment	3
	<b>16</b>
SECOND SEMESTER	
___ WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW)	4
___ WLDG 1337 Introduction to Welding Metallurgy	3
___ TECM 1349 Technical Math Applications	3
___ WLDG 1291 Special Topics in Welder/Welding Technologist: Introduction to Gas Metal Arc	2
___ ---- ---- LP Sciences/Mathematics	3/4
	<b>15/16</b>
THIRD SEMESTER	
___ WLDG 1435 Introduction to Pipe Welding	4
___ WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding	4
___ WLDG 1327 Welding Codes	3
___ ---- ---- Creative Arts/LPC	3
___ WLDG 1312 Introduction to Flux Cored ARC Welding (FCAW)	3
	<b>17</b>
FOURTH SEMESTER	
___ WLDG 2453 Advanced Pipe Welding	4
___• WLDG 2451 Advanced Gas Tungsten Arc (GTAW) Welding	4
___ SPCH ---- Communication Area Option	3
___ ---- ---- SBS/GOVT/HIST	3
___ ---- ---- Elective	3
	<b>17</b>
<b>Total Semester Credit Hours for Degree</b>	<b>65/66</b>

**NOTE:** To be eligible for a program related internship a student must have completed 25 credit hours of program specific courses and have a 2.5 GPA and/or by approval of Division Chair.

## Certificate of Completion Welding Technology – WE1

FIRST SEMESTER	SCH
___ WLDG 1313 Introduction to Blueprint Reading for Welders	3
___ WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)	4
___ WLDG 1323 Welding Safety, Tools & Equipment	3
	<b>10</b>
SECOND SEMESTER	
___ WLDG 1337 Introduction to Welding Metallurgy	3
___ WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW)	4
___ WLDG 1291 Special Topics in Welder/Welding Technologist: Introduction to Gas Arc	2
	<b>9</b>
THIRD SEMESTER	
___ WLDG 1435 Introduction to Pipe Welding	4
___ WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding	4
___ WLDG 1327 Welding Codes	3
___ WLDG 1312 Introduction to Flux Cored ARC Welding (FCAW)	3
	<b>14</b>
FOURTH SEMESTER	
___ WLDG 2453 Advanced Pipe Welding	4
___• WLDG 2451 Advanced Gas Tungsten Arc (GTAW) Welding	4
	<b>8</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>41</b>

## Certificate of Completion Welding Inspection Technology – WI1

FIRST SEMESTER	SCH
___ WLDG 1313 Introduction to Blueprint Reading for Welders	3
___ WLDG 1337 Introduction to Welding Metallurgy	3
___ NDTE 1401 Film Interpretation of Weldments	4
___ NDTE 1410 Liquid Penetrant/Magnetic Particle Testing	4
	<b>14</b>
SECOND SEMESTER	
___• NDTE 2411 Preparation for Certified Welding Inspector Exam	4
___ WLDG 1327 Welding Codes	3
___ NDTE 1405 Introduction to Ultrasonics	4
	<b>11</b>
<b>Total Semester Credit Hours for Certificate</b>	<b>25</b>