

Telecommunications Systems Installer

(CSIR 1303 6A1)



**LAMAR INSTITUTE
OF TECHNOLOGY**

CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Face to face hybrid

PREREQUISITE/CO-REQUISITE:

None

COURSE DESCRIPTION

This course reviews fundamentals of telecommunications media, including terminology, rules and regulations, safety procedures, industry standards and protocols, installation, connectorization, maintenance, and troubleshooting. General principles of customer service within a technical environment are also studied. The competencies acquired are summarized in a comprehensive project covering network, telephone and coaxial wiring, fiber optics cables, satellite television systems, structural wiring, and "smart house" concepts.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to
Read and interpret blueprints to determine wiring requirements; identify telecommunications system components; identify and describe industry standards and protocols; describe safety procedures; select proper tools; connectorize telecommunications media; install, maintain, and troubleshoot telecommunications media; discuss internal/external customer relationships; communicate technical information to customers in a clear, precise and logical manner; update customers on work progress to maintain customer satisfaction and public relations.

INSTRUCTOR CONTACT INFORMATION

Instructor:	Tim Storbeck
Email:	tjstorbeck@lit.edu
Office Phone:	409-247-5236
Office Location:	T4 Rm 109D
Office Hours	Posted outside my office and on Starfish or make an appointment through email

REQUIRED TEXTBOOK AND MATERIALS

CABLING The complete guide to Copper and Fiber-Optic Networking
ISBN 978-1-118-80732-3

ATTENDANCE POLICY

Attendance is mandatory on lecture day.
Attendance will be 10% of the grade for class.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#). If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

Important Drop Dates

Last Day to Drop with Refund	02/10/2025
Last Day to Pay Tuition to Avoid Drop	02/20/2025
Last Day to Drop without Academic Penalty	02/26/2025
Last Day to Drop with Academic Penalty	04/14/2025

COURSE CALENDAR

WEEK	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week1 1/21-1/26	Course Introduction	Syllabus	Book at a glance 2/3
Week2 1/26-2/2	Part I LAN Network an Cabling Systems	Ch 1,2, &3	Learning Standards 92/3
Week3 2/2-2/9	Choosing the right cable	Ch 4 & 5	Labs Terminating cables 2/10
Week4 2/9-2/16	Tools of the Trade	Ch 6,7, &8	Labs working with the tools 2/17

Week5 2/17-2/23	Copper or Fiber	Ch 7 & 8	Labs Testing speed 2/24
Week 6 2/23-3/2	Termination, Wall Plates and connectors	Ch 9 & 10	Labs installing plates and Connectors 3/3
Weel 7 3/2-3/9	Network Equipment	Ch 11	Labs installing racks and wire trays 3/7
Week 8 3/16-3/23	Wireless Networks	Ch12	Labs building a mesh wireless network 3/24
Week 9 3/23-3/30	Creating a request for proposal & Work experience from the field	Ch 13, 16, & 17	Labs Filling out paperwork correctly 3/31
Week 10 3/30-4/6	History of Fiber Optics	Ch 18 & 19	Working w/ laser and LED 4/7
Week 11 4/6-4/13	Principles of light	Ch 20	Working w/ Laser and LED 4/14
Week 12 4/13-4/20	Types of Fiber cable	Ch 21,22, &23	Labs research availability of Fiber cable 4/21
Week 13 4/20-4/27	Connectors and splicing Fiber	Ch 24 & 25	Labs Splicing and terminating 4/28
Week 14 4/27-5/4	Fiber Multiplexer and Equipment	Ch 28, 29, & 30	Fiber optic detectors and Receivers. 5/5
Week 15 5/4-5/11	Review	Finish any labs not finished	Last chance for Hands on Lab make up. 5/12
Week 16 5/11-5/14	Final	Last chance to turn in late work	Final 5/12

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- End of Chapter quiz-test 30%
- Attendance 10%
- Labs 40%
- Final 20%

GRADING SCALE

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

EAGLE LEARNING ESSENTIALS

Eagle Learning Essentials (ELE) <https://lit.edu/student-success/eagle-learning-essentials> is an affordable textbook rental program through the Barnes and Noble Bookstore. Through this program, students can receive required textbooks, lab manuals, access codes and electronic books conveniently before the first day of class.

The ELE bundle will provide the needed learning materials at \$14 per credit hour (added to your student account), saving students up to 35-50% on the cost of course materials. The cost can be paid by financial aid or by the student. If a student enrolls in a payment plan, this charge will be included in the payment plan calculations. Supplies are not included in this program and will need to be purchased separately.

LIT students are automatically enrolled in the program at the time of registration and will begin receiving emails about selecting their preferred delivery method.