

**ENGINEER SENIOR LEADER COURSE
SYLLABUS FOR 12T40
CONSTRUCTION EQUIPMENT SUPERVISOR**

I. INTRODUCTION

The 12T SLC course is a 6 week 3 day USAES course taught at the Maneuver Support Center of Excellence NCO Academy. It employs classroom instruction using the Small Group process technique and Small Group Instruction (SGI) with practical applications, performance evaluations, and testing.

II. LEARNING OUTCOMES

Upon successful completion of this course, students will be able to do the following:

- A. Determine Soil Stabilization Methods
- B. Prepare Design Specifications for Construction Projects
- C. Design Roads and Airfield Pavement Structures
- D. Conduct Technical Inspections
- E. Determine Logistical Requirements for Bunkers and Shelters
- F. Supervise Infrastructure Reconnaissance
- G. Conduct Advance Project Management Using Microsoft Project
- H. Theater of Construction Management System (TCMS)
- I. Artillery/Air Defense Survey
- J. CIED
- K. Hydrographic survey and Geodetic Supervisory Operations

III. INSTRUCTIONAL MATERIALS

The instructional materials identified for this course will be viewable through blackboard once access has been granted.

IV. COURSE REQUIREMENTS

A. Reading Assignments:

Reading assignments will be given frequently. The material is to be carefully studied in preparation for class discussion.

B. Papers:

Several essays will be written during the course using The American Psychological Association (APA) format. Subjects will be assigned by the instructor.

V. EXAMINATIONS

An examination will be given upon completion of following Terminal Learning Objectives:

- A. Determine Soil Stabilization Methods Exam
- B. Design Road And Airfield Pavement Structures Exam
- C. Review Tech Advancements And Capabilities Exam
- D. TCMS Training Exam
- E. MS PROJECT Exam
- F. Artillery / Air Defense Survey Exam

VI. PERFORMANCE ORIENTED ASSESSMENTS (POAs)

All POAs identified for this course will be viewable through blackboard, once access has been granted.

Students will be evaluated on the following POAs:

- A. Leadership In A Garrison Environment
- B. In-Ranks Inspection
- C. American Psychological Association (APA) Written Communication
- D. Student Led Discussion
- E. Formal Memorandum
- F. Contribution To Group Work
- G. Army Physical Readiness Training

VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM COURSE INSTRUCTOR

- A. Students will be participating in a Warfighting Exercise. This exercise will require students to understand and apply the Military Decision Making Process (MDMP). It is also recommended to students know how to operate Command Post of the Future (CPOF).
- B. Cellular phones and other Electronic Devices will be turned off while the student is in the classroom.

VIII. COURSE OUTLINE

12T40 Senior Technical NCO (SLC 5 weeks)

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Counter Improvised Explosive Device (CIED)

Training

(33 hours)

- Manage CREW Systems
- Establish the Common Operational Picture
- Plan Unit Movement at Company Level
- Plan for the Integration of CIED Assets in COIN Environment
- Respond to an Improvised Explosive Device at the Company Level
- Apply Pattern Analysis Products to Support CIED Operations
- Apply Predictive Analysis Products to Support CIED Operations

Technical Training

(93 hours)

- Prepare Design Specifications for Construction Projects (16.2)
- Prepare Design Specifications Proposals for a Horizontal Construction Print
- Plan Airfield/Heliport Obstruction Chart and Navigational-Aid (NavAid) Survey
- Design Road and Airfield Pavement Structures Using California Bearing Ratio (CBR) Data
- Check a Project Progress Report
- Approve Field Operations Plans
- Quality Assurance and Quality Control Program
- Write and Develop a Scope of Work for a Construction Project

Situational Training Exercise

(72 hours)

- Situational Training Exercise

The 12T40 Senior Leader Course (SLC) provides Senior Technical Engineer Supervisors with training in: Common Leader Training, Counter Improvised Explosive Devices (CIED), Military Occupational Specialty (MOS) Technical Training and a Situational Training Exercise (STX).