

SRI SIVANI COLLEGE OF ENGINEERING

(Under the Management of Sri Sivani Educational Society, Srikakulam)
(Approved by AICTE, New Delhi and Affiliated to JNTUGV, Vizianagaram-CC-W6,
UGC Recognition under 2(f) & 12(B), ISO 9001:2015 Certified)
NH-16, Chilakapalem Jn., Srikakulam Dist. Andhra Pradesh -532410

DEPARTMENT OF CIVIL ENGINEERING COURSE OUTCOMES

Year/Sem: II – I Regulation: R20 Academic Year: 2023-24

Name of the Course: Mathematics-III Course Code: R2021011

Course Outcomes:

After the completion of the course the student should be able to:

C201.01: Interpret the physical meaning of different operators such as gradient, curl and divergence.

C201.02: Estimate the work done against a field, circulation and flux using vector calculus.

C201.03: Apply the Laplace transform for solving differential equations.

C201.04: Find or compute the Fourier series of periodic signals

C201.05: Apply integral expressions for the forwards and inverse Fourier transform

to a range of non-periodic waveforms.

C201.06: Identify solution methods for partial differential equations that model physical processes.

Name of the Course: Strength of Materials Course Code: R2021012

Course Outcomes:

After the completion of the course the student should be able to:

C202.01: Understand the basic materials behavior under the influence of different external loading conditions and the support conditions

C202.02: Solve the problems on elongation of bars, thermal stresses and strain energy

C202.03: Draw the diagrams indicating the variation of the key performance features like bending moment and shear forces

C202.04: Comprehend the bending concepts and calculate section modulus and determine stresses developed in the beams

C202.05: Attain knowledge of deflections due to various loading conditions

C202.06: Assess stresses across section of the thin and thick cylinders to arrive at optimum sections to withstand the internal pressure using Lame's equation.

Name of the Course: Fluid Mechanics Course Code: R2021013

Course Outcomes:

After the completion of the course the student should be able to:

C203.01: Understand the various properties of fluids and their influence on fluid motion.

C203.02: Analyze a variety of problems in fluid statics and dynamics.

C203.03: Calculate the forces that act on submerged planes and curves.

C203.04: Ability to analyze various types of fluid flows.

C203.05: Apply the integral forms of the three fundamental laws of fluid mechanics to turbulent and laminar flow through pipes and ducts in order to predict relevant pressures, velocities and forces.

C203.06: Measure the quantities of fluid flowing in pipes, tanks and channels.

Name of the Course: Surveying & Geometrics

Course Outcomes:

After the completion of the course the student should be able to:

C204.01: Evaluate the linear distances, angles, bearings using prismatic & surveyors compass and detect local attraction and correction of bearings of a closed traverse.

C204.02: Do leveling concept, different leveling methods like H.I and Rise & fall method, contouring principles & characteristics, area determination of irregular boundary fields using Simpsons rule and to find volume using trapezoidal & prismoidal rules.

C204.03: Find horizontal angles with Theodolite using Repetition & Reiteration methods and about Trigonometric leveling.

C204.04: Attain knowledge about Traversing concept, adjustments to a closed traverse and determining omitted measurements.

C204.05: Understand the Curves, types, setting of Simple circular and compound curves, Tacheometry and modern surveying instruments.

C204.06: Perform Photogrammetry surveying, concepts and different methods of Photogrammetry survey.

Name of the Course: Highway Engineering

Course Outcomes:

After the completion of the course the student should be able to:

C205.01: Plan highway network for a given area.

C205.02: Determine Highway alignment and design highway geometrics.

C205.03: Design Intersections and prepare traffic management plans.

C205.04: Basic Parameters of Traffic-Volume, Speed and Density- Traffic Volume Studies.

C205.05: Design flexible and rigid pavements.

C205.06: Judge suitability of pavement materials.

Name of the Course: Concrete Technology Lab

Course Outcomes: On completion of the course, the students will be able to

C206.01: Determine consistency, fineness, setting times, specific gravity and compressive strength of cement.

C206.02: Determine workability of cement concrete by compaction factor, slump and Vee – Bee tests.

C206.03: Determine specific gravity of coarse aggregate and fine aggregate by Sieve analysis.

C206.04: Determine flakiness and elongation index of aggregates.

C206.05: Determine bulking of sand.

C206.06: Understand non-destructive testing procedures on concrete.

Name of the Course: Highway Engineering Lab

Course Outcomes:

After the completion of the course the student should be able to:

C207.01: Test aggregates and judge the suitability of materials for the road construction.

C207.02: Test the given bitumen samples and judge their suitability for the road construction.

C207.03: Obtain the optimum bitumen content for Bituminous Concrete.

C207.04: Determine the traffic volume, speed and parking characteristics.

C207.05: Draw highway cross sections and intersections.

C207.06: Determine the Marshall stability mix design.

Course Code: R2021014

Course Code: R2021015

Course Code: R2021016

Course Code: R2021017

Name of the Course: Surveying Field work I Course Code: R2021018

Course Outcomes:

After the completion of the course the student should be able to:

C208.01: Conduct Road widening & Area determination of a closed traverse using Chain surveying.

C208.02: Determine inaccessible distance & Area of closed traverse using prismatic compass.

C208.03: Determine area of a closed traverse using Radiation method of Plane table surveying.

C208.04: Determine area of a closed traverse using Intersection method of Plane table surveying.

C208.05: Conduct Levelling experiment using Height of instrument method.

C208.06: Conduct Levelling experiment using Rise & Fall method and to conduct Longitudinal & cross sectioning.

Name of the Course: Skill oriented course-II Course Code: R202101A

Course Outcomes:

After the completion of the course the student should be able to:

C209.01: Distinguish various types of bricks & stones used in construction

C209.02: Comprehend different components & systems of buildings

C209.03: Understand properties of masonry units, strength and factors affecting strength.

C209.04: Understand design criteria of various types of walls subjected to different load system.

C209.05: Impart the culture of following the codes for strength, serviceability and durability as an ethics.

C209.06: Work together in groups, accomplish communication skills and writing reports

Year/Sem: II – II Regulation: R20 Academic Year: 2023-24

Name of the Course: CVSM Course Code: R2022011

Course Outcomes:

After the completion of the course the student should be able to:

C210.01: Apply Cauchy-Riemann Equations to Complex functions in Order to determine whether a given continuous function is analytic(L3)

C210.02: Find the differentiation and integration of complex functions Used in engineering problems(L5)

C210.03: Use the Cauchy residue theorem to evaluate certain integrals (L3)

C210.04: Apply discrete and continuous probability distributions(L3)

C210.05: Estimate the population parameters using sample data. (L6)

C210.06: Test the hypothesis for large samples and small samples. (L4).

Name of the Course: Strength of Materials II Course Code: R2022012

Course Outcomes:

After the completion of the course the student should be able to:

C211.01: Understand the basic concepts of Principal stresses developed in a member when it is subjected to stresses along different axes and design the sections.

C211.02: Assess stresses in different engineering applications like shafts, springs, columns and struts subjected to different loading conditions

C211.03: Assess different types of springs and about springs in parallel and series systems. deflection & load carrying capacity

C211.04: Gain knowledge of columns, types and their critical load carrying capacity with respect to different formulae.

C211.05: Comprehend direct and bending stresses development under axial load and bending moment in dams, retaining walls and chimneys, and also stability analysis.

C211.06: Analyze maximum and minimum stresses due to unsymmetrical bending and position of shear center.

Name of the Course: Hydraulics and Hydraulic Machinery

Course Code: R2022013

Course Outcomes:

After the completion of the course the student should be able to:

C212.01: Solve uniform open channel flow problems.

C212.02: Solve non-uniform open channel flow problems.

C212.03: Apply the principals of dimensional analysis and similitude in hydraulic model testing.

C212.04: Analyze the hydro dynamic forces of jets on different types of plates and work done by jet on plates.

C212.05: Understand the working principles of various hydraulic machines.

C212.06: Understand the working principles of various hydraulic pumps.

Name of the Course: Environmental Engineering Course Code: R2022014

Course Outcomes:

After the completion of the course the student should be able to:

C213.01: Design protected water supply systems with water quality requirement for domestic usage

C213.02: Design a water treatment plant for a city.

C213.03: Identify the water source, select proper intake structure and choose pipe material

C213.04: Design water distribution networking system and select required water main appurtenances

C213.05: Design building drainage, sewerage system and select the appropriate appurtenances for sewerage system.

C213.06: Characterize sewage generated and design a sewage treatment plant with sludge disposal management.

Name of the Course: Managerial Economics & Financial Analysis Course Code: R2022015

Course Outcomes: On completion of the course, the students will be able to

C214.01: Estimate the Demand and demand elasticity for a product.

C214.02: Understand the Input-Output-Cost relationships and estimation of the least cost combination of inputs.

C214.03: Understand the nature of different markets and Price output determination under various market conditions.

C214.04: Understand different Business cycles.

C214.05: Prepare Financial Statements and the usage of various accounting tools for Analysis.

C214.06: Evaluate various investment project proposals with the help of capital budgeting techniques for decision making.

Name of the Course: Environmental Engineering Lab Course Code: R2022016

Course Outcomes:

After the completion of the course the student should be able to:

C215.01: Perform and recognize the appropriate water and wastewater sampling procedures and sample preservations and tests relating to water and wastewater quality

C215.02: Analyze water and wastewater in terms of Electrometric and Titrimetric methods and apply the laboratorial results to water problem.

C215.03: Conduct Titrimetric methods for chemical analysis of water and wastewater.

C215.04: Estimate total solids and determine the optimum coagulant dose required for coagulation process.

Course Code: R2022017

Course Code: R2022019

C215.05: Learn Spectro analytical procedures for the quantitative determination of chemical elements.

C215.06: Write clear technical lab reports and Work together with team spirit.

Name of the Course: Strength of Materials Lab

Course Outcomes:

After the completion of the course the student should be able to:

C216.01: Analyze the tensile and compressive strength of a specimen for applying in a practical design.

C216.02: Determine the hardness, impact strength, fatigue strength to analyze the application of a specific material for a given design requirements for different loading conditions of structures

C216.03: Compute and Analyze engineering values (e.g. stress or strain) from laboratory measurements.

C216.04: Evaluate the capacity of a material to withstand torsional stresses for a safe and sustainable design of machine elements.

C216.05: Analyze experimental data and develop empirical equations

C216.06: Write a technical laboratory report

Name of the Course: Fluid Mechanics & Hydraulics Machinery Lab

Course Code: R2022018

Course Outcomes:

After the completion of the course the student should be able to:

C217.01: Calibration of Venturi meter & Orifice meter.

C217.02: Determination of Coefficient of loss of head in a sudden contraction and friction factor.

C217.03: Verification of Bernoulli's equation.

C217.04: Impact of jet on vanes.

C217.05: Performance test on Pelton wheel turbine and Francis turbine.

C217.06: Efficiency test on centrifugal pump and reciprocating pump.

Name of the Course: Skill Oriented Course-II

Course Outcomes:

After the completion of the course the student should be able to:

C218.01: Investigate general safety conditions, and may focus on specific concerns or users.

C218.02: Determine whether good or poor short-term safety performance is due to the inherent safety or hazards of the site

C218.03: Understand Feasibility stage, or project scoping, when the general nature of the project.

C218.04: Prevent crashes that sometimes occur due to increased driving speeds after road resurfacing

C218.05. Find the Deficiencies in crash reporting limit the effectiveness of these systems.

C218.06. Perform the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team.

Year/Sem: III – I Regulation: R20 Academic Year: 2023-24

Name of the Course: Structural Analysis Course Code: R2031011

Course Outcomes:

After the completion of the course the student should be able to:

C301.01: Gain knowledge of propped cantilever and fixed beams analysis under unsymmetrical loading and draw shear force and bending moment diagrams.

C301.02: Analyze continuous beams and frames using Slope and deflection & Moment distribution methods and draw shear force and bending moment diagrams.

C301.03: Analyze pin jointed perfect frames using Method of joints.

C301.04: Analyze pin jointed perfect frames using Method of Sections & Tension coefficients.

C301.05: Draw influence line diagrams for shear force and bending moment diagrams due to moving loads and to find the load position for maximum bending moment.

C301.06: Do Analysis of continuous beams and to draw shear force and bending moment diagrams using matrix methods (Stiffness & Flexibility methods)

Name of the Course: Design and Drawing of Reinforced Concrete Structures Course Code: R2031012

Course Outcomes:

After the completion of the course the student should be able to:

C302.01: Familiarize with different design philosophies and work with designs

C302.02: Design of members in flexural and shear

C302.03: Understand bond and torsion

C302.04: Design of compression members under different types of loading

C302.05: Understand different types of footings and design.

C302.06: Identify the necessity and Application of different design methods for different concrete structures.

Name of the Course: Geotechnical Engineering -I Course Code: R2031013

Course Outcomes:

After the completion of the course the student should be able to:

C303.01: Define various quantities related to soil mechanics and establish their inter-relationships.

C303.02: Determine various index properties of the soils and classify the soils.

C303.03: Determine different engineering properties of the soil such as compaction, permeability, consolidation and shear strength in the laboratory.

C303.04: Apply the above concepts in day-to-day civil engineering practice.

C303.05: Understand Total, neutral and effective stresses –quick sand condition Seepage.

C303.06: Find out Stress-Strain behaviour of clays – Shear Strength determination- various drainage conditions.

Name of the Course: Environmental Management Course Code: R203101J

Course Outcomes:

After the completion of the course the student should be able to:

C304.01: Understand energy scenario, energy sources, utilization, impacts of oil pollution control

measures.

C304.02: Learn impact on soil, plant growth for different Agriculture Systems, managing soil erosion.

C304.03: Integrate perspective on distribution of water resources, their usage and water supply system.

C304.04: Understand Water pollution, impairment of natural water bodies, mitigate waterborne diseases.

C304.05: Identify essential components of the air pollution phenomenon and controlling Atmospheric

pollution.

C304.06: Develop critical thinking and problem-solving abilities necessary towards Natural

Hazards like earthquakes, volcanos, floods and drought impact on living habitat.

Name of the Course: Construction Technology and Management Course Code: R2031015

Course Outcomes:

After the completion of the course the student should be able to:

C305.01: Appreciate the importance of construction planning

C305.02: Identify the importance of project evaluation and review technique

C305.03: Understand the functioning of capacities various earth moving equipment

C305.04: Understand the functioning of various earth moving equipment

C305.05. Know the methods of production of aggregate products and concreting

C305.06. Apply the gained knowledge to project management and construction techniques

Name of the Course: Surveying Field Work-II

Course Code: R2031014

Course Outcomes:

After the completion of the course the student be able to:

C306.01: Determine the horizontal angles, vertical angles and distance between two inaccessible points by using theodolite

C306.02: Determine the height of far object by using theodolite

C306.03: Determine the height of objects and distance between the objects by using Tachometric principles

C306.04: Set curves by using different methods like Rankine's method, offset method.

C306.05: Draw contour maps based on different topographical conditions

C306.06: Calculate various parameter like areas, location of different points on the ground, traversing, contouring, determination of height of the object, distance between two inaccessible points by using total station

Name of the Course: Geotechnical Engineering Lab

Course Code: R2031015

Course Outcomes:

After the completion of the course the student should be able to:

C307.01: Determine index properties of soil and classify them.

C307.02: Determine permeability of soils.

C307.03: Determine Compaction, Consolidation and shear strength characteristics.

C307.04: Determine Field Density-Core cutter and Sand replacement methods.

C307.05: Determine Direct Shear test and Triaxial Compression test

C307.06: Determine Grain size analysis by sieving.

Name of the Course: Skill Advanced Course Course Course Course

Course Outcomes:

After the completion of the course the student should be able to:

C308.01: Design and construction of Industrial chimneys

C308.02: Design and construction of water tank of an apartment

C308.03: Design and construction of Reservoir of a village

C308.04: Design of service reservoir and Estimation of drains for village

C308.05: Design spillway for low and medium height dams and estimate Concrete Roads

C308.06: Design and estimate, Rainwater harvesting ponds and drains for a village

Year/Sem: III – II Regulation: R20 Academic Year: 2023-24

Name of the Course: Design and Drawing of Steel Structures Course Code: R2032011

Course Outcomes:

After the completion of the course the student should be able to:

C309.01: Work with relevant IS codes for design of steel structures

C309.02: Analyse and design of flexural members and their detailing

C309.03: Design of tension members of different types with connection detailing

C309.04: Design compression members of different types with connection detailing

C309.05: Design of Plate Girder and Gantry Girder with connection detailing

C309.06: Draw different components of steel structures

Name of the Course: Water Resource Engineering Course Code: R2032012

Course Outcomes:

After the completion of the course the student should be able to:

C310.01: Understand the basic concept of crop rotation and frequency of irrigation.

C310.02: Quantify hydrologic components and apply concepts in hydrologic design of water resources projects.

C310.03: Develop Intensity-Duration-Frequency and Depth-Area Duration curves to design hydraulic structures.

C310.04: Develop design storms and carry out frequency analysis

C310.05: Develop flow mass curve and flow duration curve, apply hydrograph analysis in the design of water resources projects.

C310.06: Develop unit hydrograph and synthetic hydrograph.

Name of the Course: Geotechnical Engineering-II Course Code: R2032013

Course Outcomes:

After the completion of the course the student should be able to:

C311.01: Understand the various methods of soil exploration and prepare soil investigation report

C311.02: Analyse the stability of slopes under different conditions and design the retaining walls

C311.03: Understand the various types of shallow foundations and decide on their location based on soil characteristics.

C311.04: Understand about the types of shear and settlement failures of the soil

C311.05: Calculate the bearing capacity of the soil based on the shear failure and settlement failure of the soil

C311.06: Understand about design of the pile foundations and well foundations

Name of the Course: Remote Sensing and GIS

Course Outcomes:

After the completion of the course the student should be able to:

C312.01: Be familiar with ground, air and satellite-based sensor platforms.

C312.02: Interpret the aerial photographs and satellite imageries.

C312.03: Interpret the aware of the hardware and software requirements.

C312.04: Create the principal of spatial data.

C312.05: Create and input spatial data for GIS application.

C312.06: Apply RS and GIS concepts for application in Civil Engineering.

Name of the Course: Traffic Engineering

Course Outcomes:

After the completion of the course the student should be able to:

C313.01: Determine various components and characteristics of traffic.

C313.02: Apply various traffic control devices.

C313.03: Apply principles of highway safety.

C313.04: Understand the detrimental effects of traffic on environment.

C313.05: Estimate highway capacity and level of service analysis.

C313.06: Learn about intelligent vehicle highway systems.

Name of the Course: Estimation, Costing and Contracts Lab

Course Outcomes:

After the completion of the course the student should be able to:

C314.01: Prepare an Abstract Estimate for a Residential Building

C314.02: Estimate area, volume & cost of various items of work

C314.03: Demonstrate the calculation of earth work quantity for roads and canals.

C314.04: Design and Prepare Bar bending schedule for reinforcement works.

C314.05: Evaluate mathematical & numerical models for rate & quantity estimation

C314.06: Understand how to prepare a Notice inviting tender document for bidding.

Name of the Course: Remote Sensing and GIS Lab

Course Outcomes:

After the completion of the course the student should be able to:

C315.01: Work comfortably on GIS software

C315.02: Digitize and create thematic map and extract important features

C315.03: Develop digital elevation model

C315.04: Interpretation and Estimation of features from satellite imagery.

C315.05: Analyze and Modelling using GIS software.

Course Code: R203201K

Course Code: R203201D

Course Code: R2032016

Course Code: R2032017

Name of the Course: Civil Engineering Practice Lab

Course Code: R2032018

Course Outcomes:

After the completion of the course the student:

C316.01: Gains adequate confidence to work as a consulting engineer in any field of Civil Engineering

C316.02: Understands the duties, responsibilities and codal practices of Civil Engineering profession

C316.03: Will plan, design and execute Civil Engineering projects

C316.04: Can build safety related and environmental impact related codal protocols into project planning and execution

C316.05: Can optimize project costs using sustainability concepts

C316.06: Understand about the case studies of different civil Engineering projects

Name of the Course: Skill Advanced Course/ Soft Skill Course- Lab Course Code: R2032019

Course Outcomes:

After the completion of the course the student should be able to:

C317.01: Analyze and design determinate and indeterminate structures. C317.02: Understand design and analyze plane frames and space frame

C317.03: Design and analyze plane frames and space frame with dead and live load

C317.04: Design of residential building subjected and roof Truss to all loads (DL, LL, WL, EQL)

C317.05: Detailing of built-up steel Beam, develop excel sheet for foundation,

C317.06: Detailing of RCC beam, Slab and Steel Compression members

Year/Sem: IV – I Regulation: R20 Academic Year: 2023-24

Name of the Course: Structural Dynamics Course Code: R204101C

Course Outcomes:

After the completion of the course the student should be able to:

C401.01: Understand the response of structural systems to dynamic loads

C401.02: Understand the behavior and response of SDOF and MDOF structures with various dynamic loading

Course Code: R204101G

C401.03: Understand the behaviour and response of MDOF structures with various dynamic loading

C401.04: Learn possess the ability to find out suitable solution for continuous system

C401.05: Understand the behavior of structures subjected to dynamic loads under free vibration

C401.06: Understand the behavior of structures subjected to dynamic loads harmonic excitation and earthquake load

Name of the Course: Disaster Management & Mitigation

Course Outcomes:

After the completion of the course the student should be able to:

C402.01: Apply Disaster Concepts to Management

C402.02: Analyze Relationship between Development and Disasters.

C402.03: Understand the Disasters impacts

C402.04: Understand Categories of Disasters

C402.05: Explain the process of risk management **C402.06:** Realize the responsibilities to society

Name of the Course: Urban hydrology Course Code: R204101K

Course Outcomes:

After the completion of the course the student should be able to:

C403.01: Perform precipitation analysis, estimation of Time of concentration and to study about IDF curves.

C403.02: Do peak flow estimation approaches using Rational methods, NRCS curve number approach.

C403.03: Comprehend elements of drainage system in open channels & underground drains.

C403.04: Study about pumping and source control in drainage system.

C403.05: Analyse and manage storm water drainage structures.

C403.06: Gain knowledge about objectives, principles and planning process of master drainage plans.

Name of the Course: Environmental Management Course Code: R203101R

Course Outcomes:

After the completion of the course the student should be able to:

C404.01: Understand energy scenario, energy sources, utilization, impacts of oil pollution control measures.

C404.02: Learn impact on soil, plant growth for different Agriculture Systems, managing soil erosion.

C404.03: Integrate perspective on distribution of water resources, their usage and water supply system.

C404.04: Understand Water pollution, impairment of natural water bodies, mitigate waterborne diseases.

C404.05: Identify essential components of the air pollution phenomenon and controlling Atmospheric pollution.

C404.06: Develop critical thinking and problem-solving abilities necessary towards Natural Hazards like earthquakes, volcanos, floods and drought impact on living habitat.

Name of the Course: Elements of Civil Engineering Course Code: R204101T

Course Outcomes:

After the completion of the course the student should be able to:

C405.01: Understand the basics of Civil Engineering concepts.

C405.02: Understand the Concept of surveying, elevations and mapping.

C405.03: Comprehend the construction materials and elements.

C405.04: Recognize the concept of planning and construction.

C405.05: Understand water resource development.

C405.06: Gain knowledge about overall infrastructure development.

Name of the Course: Universal Human Values -2 Course Code: R2041011

Course Outcomes:

After completion of this course, students will be able to:

C406.01: Analyse the essentials of human values and skills, self-exploration, happiness and prosperity.

C406.02: Evaluate coexistence of the "I" with the body.

C406.03: Identify and evaluate the role of harmony in family, society and universal order.

C406.04: Understand and associate the holistic perception of harmony at all levels of existence.

C406.05: Develop appropriate technologies and management patterns to create harmony in professional and personal lives.

C406.06: Apply what they have learnt to their own self in different day-to-day settings in real life, at least a beginning would be made in this direction

Name of the Course: Skill Advanced Course Course Course Course

Course Outcomes:

After the completion of the course the student should be able to:

C407.01: Understand the history of spatial planning

C407.02: Understand various modes of planning.

C407.03: Apply basic analytical and optimizing techniques needed.

C407.04: Forecast population in settlement by various methods

C407.05: Ability to plan project management

C407.06: Learn about emerging trends in planning of cities and towns

Year/Sem: IV – II Regulation: R20 Academic Year: 2023-24

Name of the Course: Project work -seminar and internship in industry Course Code: R204201PR01

Course Outcomes:

After the completion of the Project work, the student will be able to:

C409.01: Apply all levels of Engineering knowledge in solving the Engineering problems.

C409.02: Apply research skills to R&D activities and consultancy work.

C409.03: Use modern engineering tools, software, and equipment to analyze problems and develop solutions.

C409.04: Able to analyze, design and develop solution to solve the complex problems

C409.05: Work together with team spirit.

C409.06: Write effective technical report, document the projects and demonstrate through presentations