



VELS UNIVERSITY



VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)

(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

PALLAVARAM - CHENNAI - INDIA

School of Ocean Engineering



Brochure

(Programme and Courses offered)

2016-2017

PV Vaithiyalingam Road, Velan Nagar, Pallavaram, Chennai - 600117.

Phone: + 91 - 44 - 2266 2500 / 2501 / 2502 / 2503

Website: www.velsuniv.ac.in

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About the School

Ocean Engineering Courses such as Naval Architecture & Offshore Engineering, Petroleum Engineering and Coastal & Ocean Engineering are the application of scientific methods for the benefit of the mankind. The School of Ocean Engineering under VELS UNIVERSITY is providing very good education and the courses are designed according to the need of the industries which are related to Ocean Engineering. As such VELS UNIVERSITY has the obligation and commitment to provide education right from DIPLOMA to Ph.D (ie. Diploma, Degree, Post Graduate Degree and Research) level. The School of Ocean Engineering will be providing an excellent education for the students through teaching and learning, practices and training, research and service to the community. In addition to regular curricula, the students are taught additional subjects like communication skills and soft skills to make them ready for the industry. The students have to undergo Internship/ Training in various ocean related industries including Shipyards, Design offices, Offshore companies, Ports and Harbors, Oil and Gas industries to get good acquaintance about the field where they are likely to work. Apart from this, International/ National Conferences, Seminars, Workshops, Special lectures by eminent people will be arranged for the benefit of the students.

SCHOOL OF OCEAN ENGINEERING

Department of Navel Architecure and Offshore Engineering

1. B.TechNavel Architecture and Offshore Engineering... 4 years (8 semesters)
2. M.TechNavel Architecture and Offshore Engineering... 2 years (4 semesters)B.Tech

Department of Petroleum Engineering

1. B.Tech. Petroleum Engineering ... 4 years (8 semesters)

PROGRAM AND COURSE DETAILS 2016-2017

B.Tech - Petroleum Engineering	15EPE001	ENGINEERING MATHEMATICS - I
	15EPE002	ENGINEERING PHYSICS - I
	15EPE003	ENGINEERING CHEMISTRY
	15EPE004	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING
	15EPE005	BASICS OF COMPUTERS AND UTILITIES
	15EPE006	PRACTICAL - COMPUTER LAB
	15EPE007	PRACTICAL - ENGINEERING GRAPHICS
	15EPE008	PRACTICAL - WORKSHOP PRACTICE - I
	15EPE201	ENGLISH FOR ENGINEERS - I

B.Tech - Petroleum Engineering	15EPE202	ENVIRONMENTAL SCIENCE
	15EPE009	ENGINEERING MATHEMATICS - II
	15EPE010	ENGINEERING PHYSICS - II
	15EPE011	ENGINEERING MECHANICS
	15EPE012	MATERIAL SCIENCE
	15EPE013	C PROGRAMMING AND LANGUAGE
	15EPE014	PRACTICAL - C PROGRAMMING
	15EPE015	PRACTICAL - PHYSICS
	15EPE016	PRACTICAL - CHEMISTRY
	15EPE017	PRACTICAL - ELECTRICAL AND ELECTRONICS ENGINEERING
	15EPE018	PRACTICAL - WORKSHOP PRACTICE - II
	15EPE203	ENGLISH FOR ENGINEERS - II
	15EPE251	PERSONALITY DEVELOPMENT
	15CBPE31	ENGINEERING MATHEMATICS - III
	15CBPE32	PRINCIPLES OF PETROLEUM ENGINEERING
	15CBPE33	PETROLEUM GEOLOGY
	15CBPE34	PETROLEUM GEOPHYSICS AND GEOCHEMISTRY
	15CBPE35	FLUID MECHANICS
	15CBPE36	ELECTRONICS AND INSTRUMENTATION
	15NSS255	NSS - I
15PBPE31	PRACTICAL - GEOLOGY	

B.Tech - Petroleum Engineering	15PBPE32	PRACTICAL - FLUID MECHANICS
	15PBPE33	PRACTICAL - ELECTRONICS AND INSTRUMENTATION
	15PBPE34	PRACTICAL - ENGINEERING MECHANICS
	15CBPE41	ENGINEERING MATHEMATICS - IV
	15CBPE42	RESERVOIR ENGINEERING - I
	15CBPE43	PETROLEUM THERMODYNAMICS
	15CBPE44	DRILLING OPERATIONS AND EQUIPMENTS
	15CBPE45	DRILLING FLUIDS AND CEMENT
	15CBPE46	FORMATION EVALUATION AND WELL LOGGING
	15CBPE47	NATURAL GAS ENGINEERING
	15EPE253	SOFT SKILL
	15PBPE41	PRACTICAL - DRILLING FLUIDS AND CEMENTING
	15PBPE42	PRACTICAL - THERMAL ENGINEERING
	15PBPE43	PRACTICAL - CORE ANALYSIS
	15CBPE51	RESERVOIR ENGINEERING - II
	15CBPE52	PRODUCTION EQUIPMENTS AND OPERATION
	15CBPE53	WELL TESTING
	15CBPE54	HYDROCARBON PROCESSING AND PLANT ENGINEERING
	15CBPE55	HEAT AND MASS TRANSFER
	15CBPE56	LINEAR AND NUMERICAL PROGRAMME
15DBPE51	PETROLEUM CHEMISTRY	

B.Tech - Petroleum Engineering	15PBPE51	PRACTICAL - RESERVOIR ENGINEERING
	15PBPE52	PRACTICAL - PETROLEUM TESTING
	15PBPE53	PRACTICAL - HEAT AND MASS TRANSFER
	15CBPE61	RESERVOIR MODELING, SIMULATION AND MANAGEMENT
	15CBPE62	ENHANCED OIL RECOVERY AND WATER FLOODING
	15CBPE63	PIPELINE ENGINEERING
	15CBPE64	PETROCHEMICALS AND PETROLEUM REFINING
	15CBPE65	HSE AND HAZARDS MANAGEMENT
	15CBPE66	WELL DESIGN AND COMPLETIONS
	15DBPE61	RESERVOIR ROCKS AND FLUIDS
	15GBPE61	ENERGY TECHNOLOGY
	15PBPE61	PRACTICAL - RESERVOIR MODELING
	15PBPE62	MINOR PROJECT (CASING AND WELL DESIGN)
	15PBPE63	PRACTICAL - STANDARDS OF TRAINING, CERTIFICATION AND WATCH - KEEPING (STCW)
	15CBPE71	PETROLEUM ECONOMICS
	15CBPE72	OFFSHORE DRILLING AND PRODUCTION
	15CBPE73	UNCONVENTIONAL HYDROCARBON RESOURCES
	15CBPE74	PRODUCTION CHEMICALS AND OIL FIELD CHEMISTRY
	15CBPE75	WELL SERVICES AND STIMULATION TECHNIQUES
	15CBPE76	FIELD DEVELOPMENT PLAN

B.Tech - Petroleum Engineering	15DBPE71	ELEMENTS OF RESERVOIR ENGINEERING
	15PBPE71	PRACTICAL - AUTOCAD
	15PBPE72	MAJOR PROJECT - PHASE - I
	15UGE545	SUPPLY CHAIN MANAGEMENT
B.Tech - Naval Architecture and Offshore Engineering	15ETN001	ENGINEERING MATHEMATICS - I
	15ETN002	ENGINEERING PHYSICS - I
	15ETN003	ENGINEERING CHEMISTRY
	15ETN004	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING
	15ETN005	BASICS OF COMPUTERS AND UTILITIES
	15ETN006	PRACTICAL - COMPUTER LAB
	15ETN007	PRACTICAL - ENGINEERING GRAPHICS
	15ETN008	PRACTICAL - WORKSHOP PRACTICE - I
	15ETN201	ENGLISH FOR ENGINEERS - I
	15ETN202	ENVIRONMENTAL SCIENCE
	15ETN009	ENGINEERING MATHEMATICS - II
	15ETN010	ENGINEERING PHYSICS - II
	15ETN011	ENGINEERING MECHANICS
	15ETN012	MATERIAL SCIENCE
	15ETN013	C PROGRAMMING AND LANGUAGE
15ETN014	PRACTICAL - C PROGRAMMING	
15ETN015	PRACTICAL - PHYSICS	

B.Tech - Naval Architecture and Offshore Engineering	15ETN016	PRACTICAL - CHEMISTRY
	15ETN017	PRACTICAL - ELECTRICAL AND ELECTRONICS ENGINEERING
	15ETN018	PRACTICAL - WORKSHOP PRACTICE - II
	15ETN203	ENGLISH FOR ENGINEERS - II
	15ETN251	PERSONALITY DEVELOPMENT
	15CBNA31	ENGINEERING MATHEMATICS - III
	15CBNA32	FUNDAMENTALS OF NAVAL ARCHITECTURE
	15CBNA33	THEORY OF SHIPS
	15CBNA34	FLUID MECHANICS
	15CBNA35	APPLIED THERMODYNAMICS
	15CBNA36	STRENGTH OF MATERIALS
	15CBNA37	DESIGN OF MACHINE ELEMENTS
	15NSS255	NSS - I
	15PBNA31	PRACTICAL - SHIP DESIGN CALCULATION DRAWING AND DRAFTING - I (SDCADD - I)
	15PBNA32	PRACTICAL - ENGINEERING MECHANICS
	15PBNA33	PRACTICAL - STRENGTH OF MATERIALS
	15PBNA34	PRACTICAL - FLUID MECHANICS
	15CBNA41	ENGINEERING MATHEMATICS - IV
	15CBNA42	RESISTANCE OF SHIPS
	15CBNA43	FUNDAMENTALS OF OFFSHORE STRUCTURES
B.Tech - Naval Architecture and Offshore Engineering	15CBNA44	THEORY OF STRUCTURES

	15CBNA45	STRENGTH OF SHIPS
	15CBNA46	MARINE ELECTRICAL TECHNOLOGY
	15CBNA47	MARINE ENGINEERING - I
	15DBNA41	MARINE CORROSION AND COATING ENGINEERING
	15ETN253	SOFT SKILL
	15PBNA41	PRACTICAL - SHIP DESIGN CALCULATION DRAWING AND DRAFTING - II (SDCADD - II)
	15PBNA42	PRACTICAL - SHIP DESIGN SOFTWARE
	15PBNA43	PRACTICAL - MARINE ENGINEERING
	15CBNA51	WAVE HYDRODYNAMICS
	15CBNA52	PROPULSION OF SHIPS
	15CBNA53	MARINE DESIGN
	15CBNA54	SHIP PRODUCTION - I
	15CBNA55	ADVANCED OFFSHORE ENGINEERING
	15CBNA56	MARINE ENGINEERING - II
	15DBNA51	SUBSEA ENGINEERING
	15DBNA52	MARINE REFRIGERATION AND AIR-CONDITIONING
	15PBNA51	PRACTICAL - SHIP DESIGN CALCULATION DRAWING AND DRAFTING - III (SDCADD - III)
	15PBNA52	PRACTICAL - OFFSHORE DESIGN SOFTWARE (SACS)
	15PBNA53	SHIP VISIT AND REPORT
B.Tech - Naval Architecture and Offshore Engineering	15CBNA61	SEA KEEPING OF SHIPS AND OFFSHORE STRUCTURES

	15CBNA62	STRUCTURAL DESIGN OF SHIPS
	15CBNA63	STRUCTURAL DESIGN OF OFFSHORE STRUCTURES
	15CBNA64	FINITE ELEMENT METHODS
	15CBNA65	SHIP PRODUCTION - II
	15DBNA61	HIGH PERFORMANCE MARINE VEHICLES
	15GBNA61	PRODUCTION AND PROJECT MANAGEMENT
	15PBNA61	PRACTICAL - SHIP DESIGN CALCULATION DRAWING AND DRAFTING - IV (SDCADD - IV)
	15PBNA62	PRACTICAL - SEAMANSHIP
	15PBNA63	MINOR PROJECT
	15CBNA71	DYNAMICS OF OFFSHORE STRUCTURES
	15CBNA72	CONSTRUCTABILITY OF OFFSHORE STRUCTURES
	15CBNA73	MARINE MATERIALS AND METAL JOINING TECHNIQUES
	15CBNA74	CONTROLLABILITY OF SHIPS AND OFFSHORE STRUCTURES
	15CBNA75	STANDARDS AND RECOMMENDED PRACTICES
	15DBNA71	WARSHIP DESIGN AND CONSTRUCTION
	15GBNA71	QUALITY CONTROL AND QUALITY ASSURANCE
	15PBNA71	PRACTICAL - SHIP DESIGN CALCULATION DRAWING AND DRAFTING - V (SDCADD-V)
	15PBNA72	PRACTICAL - OFFSHORE DESIGN SOFTWARE
	15PBNA73	PRACTICAL - SHIPYARD TRAINING
B.Tech - Naval Architecture and Offshore Engineering	15PBNA74	MAJOR DESIGN PROJECT - PHASE - I