



Ballsbridge University Commonwealth of Dominica Ghana Campus

Curriculum Approved by Board of Quality Standards for B.Eng Petroleum Engineering

DETAILS - DEGREE syllabus Flowchart-FOR UNDERGRADS- 2014

### **FRESHMAN /FIRST YEAR**

#### **TRM COURSE # DESCRIPTION HRS PREREQ'S/CREDIT FOR OR CONCURRENT ENROLLMENT WITH**

**FA 1 ENGL 1303** Freshman Composition: First Year Writing I 3 Score of 240 on the TASP writing test or its equivalent

**FA 1 MATH 1431** Calculus I 4 math placement test score >65; otherwise prereq-MATH 1330

**FA 1 GEOL 1330** Physical Geology 3 Credit for/ placement out of/ or concurrent enrollment in MATH 1310 or 1311

**FA 1 GEOL 1130** Physical Geology Lab 1 Credit for or concurrent enrollment in GEOL 1330

**FA 1 CHEM 1331** Fund. of Chemistry I- Lecture 3

MATH 1330 or equivalent & successful completion of either CHEM 1301 or the chemistry placement test that is offered within 5 days either way of the start of class.

**FA 1 CHEM 1111** Fund. of Chemistry I- Lab 1 Credit for or concurrent enrollment in CHEM 1331

**FA 1 XXXX 1100** Introduction to Engineering 1 Admission as engineering college major

**FA 1 PETR 1100** Introduction to Petroleum Engineering 1 Admission as engineering college major or consent of program

**FA 1 Total Hours 17**

**SPR 1 ENGL 1304** Freshman Composition II: First Year Writing II 3 ENGL 1303 or equivalent

**SPR 1 MATH 1432** Calculus II 4 MATH 1431

**SPR 1 PHYS 1321** University Physics I 3 Credit for or concurrent enrollment in MATH 1432

**SPR 1 CHEM 1332** Fund. of Chemistry II - Lecture 3 CHEM 1331, MATH 1330 or equivalent

**SPR 1 CHEM 1112** Fund. of Chemistry II- Lab 1 CHEM 1111, Credit for or concurrent enrollment CHEM 1332

**SPR 1 CHEE 1331** Computing for Engineers 3 MATH 1431

**SPR 1 Total Hours 17**

#### **TRM COURSE # DESCRIPTION HRS PREREQ'S/CREDIT FOR OR CONCURRENT ENROLLMENT WITH**

**FA 2 HIST 1376/1377** US History to 1877 3 Core

**FA 2 MATH 2433** Calculus III 4 MATH 1431, 1432

**FA 2 PHYS 1322** University Physics II 3 PHYS 1321 & credit for or concurrent enrollment in MATH 2433

**FA 2 INDE 2333** Engineering Statistics I 3 MATH 1432, XXXX 1331 (computing for engineers)

**FA 2 PETR 2311** Reservoir Petrophysics 3

XXXX 1331 (computing for engineers), MATH 1432, PETR 1100, PHYS 1321 & Credit for or concurrent enrollment in Math 2433 and PHYS 1322

**FA 2 Total Hours 16**

**SPR 2 HIST 1378/1379** US History since 1877 3 Core

**SPR 2 MATH 3321** Engineering Mathematics 3 MATH 1432

**SPR 2 SOC&BEH SCI** Social & Behavioral Science-Core 3 Core - see approved core curriculum list- based on student's 1st semester at UH

**SPR 2 ENGI 2334** Thermodynamics I 3

CHEM 1331, MATH 2433, PHYSICS 1322, [recommend PETR 2311, credit for or concurrent enrollment in MATH 3321]

**SPR 2 PETR 2313** Reservoir Fluids 3

CHEM 1332, MATH 2433, PETR 2311, PHYSICS 1322 and credit for or concurrent enrollment in MATH 3321

**SPR 2 Total Hours 15**

## DETAILS - DEGREE PLAN Flowchart-FOR UNDERGRADS- 2014-

Note: (1) If prerequisite requirements change, then the new prerequisites must be honored (2) BU requirements must be met

### **TRM ELECTIVES CRS# ELECTIVES CRS NAME: Approved by Prof Dr.charles ELECTIVES PREREQUISITES**

CHEE 2331 Chemical Processes 3 xxxx1331(computing for engineers), CHEM 1332, MATH 1432 and PHYS 1321

CHEE 3300 Materials Science and Engineering I 3 CHEE 2331, CHEM 1332, PHYS 1321 & credit for or concurrent enrollment in MATH 3321

CHEE 3333 Thermo II 3 Prerequisites: CHEE 2332;

CHEM 3331 Fundamentals of Organic Chemistry I 3 CHEM 1332 (note- organic lecture will not apply toward degree until CHEM 3221- organic lab 1 is complete )

CHEM 3332 Fundamentals of Organic Chemistry II 3 CHEM 1332, 3331(note- organic lecture will not apply toward degree until CHEM 3222- organic lab 2 is complete)

CIVE 3331 Environmental Engineering 3 CHEM 1332,1112, CIVE 2330 and credit for or concurrent enrollment in ENGI 2334

ECE 3336 Introduction to Circuits and Electronics 3 PHYS 1322 and MATH 2433, and XXXX 1331

ECON 3385 Economics of Energy 3 ECON 2304 or 3332 or consent of instructor

ENRG 3310 Introduction to Energy & Sustainability 3 Junior standing

INDE 3333 Engineering Economy I 3 INDe 2333 **or** MECE 3360

MECT 3341 Computer Aided Drafting I 3 MATH 1330 and COSC 1304 or equivalents(CHEE 1331 is equivalent)

PETR 4392 Petroleum Project Management 3 PETR 3315, 3318, 3372, 3362.

PETR 5302 Reservoir Engineering II 3 PETR 3362.

PETR 5324 Reservoir Theory 3 PETR 3362.

PETR 5325 Reservoir Characterization 3 PETR 3315, 3362.

PETR 5350 Natural Gas 3 PETR 3362.

### **TRMOFFERED**

### **GEOSCIENCE CRS# GEOSCIENCE CRS NAME: Approved by Dr.Charles ELECTIVES PREREQUISITES**

**FALL** GEOL 3331 Environmental Geology 3 GEOL 1130 and GEOL 1330

**FALL** GEOL 3338 Environmental Hydrogeology. 3 CHEM 1331, PHYS 1321, MATH 1431, GEOL 1130 and GEOL 1330

**FALL/SPR** GEOL 4330 Introduction to Geophysics 3 GEOL 1330, MATH 2433 and PHYS 1322.

**SPRING** GEOL 4380 Petroleum Seismic Exploration 3 GEOL 4330

**FALL** GEOL 4379 Groundwater and Engineering Geophysics 3 GEOL 1330, PHYS 1322, and MATH 2432, or consent of instructor

**FALL** GEOL 3383 Remote Sensing 3 GEOL 1330, CHEM 1332, MATH 1432, and PHYS 1322, or consent of instructor

**SPRING** GEOL 4331 Introduction to Geographic Information Systems 3 upper division standing in NSM or consent of instructor; and some previous computer experience

**SPRING** GEOL 4332 Geoscience Applications of GPS and LIDAR 3 PHYS 1322 and GEOL 4330

\*NOTE any other elective outside the approved list will need Dr. charles's permission prior to taking

the class. It should pertain to petroleum engineering. He requires a syllabus of the class to be

emailed along with the request for approval for any petroleum student seeking review.

Total credit of the Bachelor degree programme in petroleum engineering will be 120 Credits or 480 BQF/QCF credits

Minimum entry requirement would be a secondary leaving certificate or equivalent.