

常州大学与圣弗朗西斯大学“2+2”合作协议
2+2 Joint Undergraduate Student Program Agreement

CHANGZHOU UNIVERSITY

AND

SAINT FRANCIS UNIVERSITY

本协议规定了圣弗朗西斯大学(以下简称“SFU”)和常州大学(以下简称“CZU”)签署同意的 2+2 联合培养项目(以下简称“项目”)的条款。本协议适用于攻读石油工程学士学位的本科生。

The agreement stipulates the terms of the 2+2 Joint Undergraduate Student Program (hereinafter referred to as the “Program”) signed by the Saint Francis University (hereinafter referred to as “SFU”) and Changzhou University (hereinafter referred to as “CZU”). This agreement is for undergraduates pursuing a bachelor's degree in Petroleum and Natural Gas Engineering.

1. 概述

参加此联合培养项目的学生将在常州大学就读前 2 年(一年级和二年级),在 SFU 就读后 2 年(三年级和四年级)。SFU 认可学生在 CZU 学习的对应课程,并认可学生在 CZU 所修对应课程的学分(课程成绩必须在 70 分及以上,详见课程对接协议书)。参加此联合培养项目的学生在圣弗朗西斯大学学习的 2 年内至少修满 64 个学分,毕业时总计必须修满 133 个学分。成功完成该联合培养项目的学生将获得 SFU 的石油与天然气工程理学学士学位(2019 年 8 月通过工程技术认证委员会认证)。

1. Overview

Students who participate in this program will be enrolled in Changzhou University for the first two years (Freshman and Sophomore year) and will be enrolled at SFU for the last two years (Junior and Senior year). SFU recognizes the equivalent courses taken at CZU and accepts credits of recognized courses earned by students from CZU (Course grade must be equal or higher than 70, see “Course Articulation Agreement”). Students enrolled in this program must earn 64 or more credit hours during the two years at Saint Francis University, 133 credit hours must be earned upon graduation from this program. Students who successfully complete this program will earn the degree of Bachelor of Science in Petroleum and Natural Gas Engineering at SFU (Received ABET Accreditation in August 2019).

2. 条款

2. Terms

A. SFU 同意以下几点:

A. SFU agrees with the following points

1. 从 2021 年秋季学期开始, SFU 每年将从 CZU 接受 10 名学生。接受学生名额可在 CZU 和 SFU 的石油工程系双方同意的前提下增加或减少。

1. Starting in the Fall semester of 2021, SFU will receive 10 students per year from CZU. This number can be increased or decreased with the agreement of both CZU and SFU Petroleum Engineering departments.
2. 参加本项目的学生将根据 SFU 在当年秋季开学前发布的条款规定支付学费和其它费用。
2. Students enrolled in the program will pay tuition and other fees based on the terms and conditions that SFU issued prior to the start of the fall semester.
3. 在 SFU 开始学习前，参加此联合培养项目的 CZU 学生必须取得 SFU 认可的英语成绩（托福：80 或雅思：6.5，详见附件 I 《英语语言能力要求说明》）来证明达到了英语语言能力要求。对于任何不满足规定的英语语言能力要求的学生，SFU 保留拒绝其入学的权利。
3. Before SFU semester starts, CZU students who participated in this program must demonstrate that they have met the English language proficiency requirements through SFU-accredited English scores (TOFEL: 80 or IELTS: 6.5, details see Appendix I “English Language Requirements Explanation”). SFU reserves the right to refuse admission to any student who does not meet the required English language proficiency requirements.
4. SFU 将提供来自常州大学的国际学生与本国和其他国际学生平等的住宿选择。学生本人支付在 SFU 所有的食宿费用。
4. SFU will assist international students from CZU to obtain accommodation with the same options as what other domestic and international students have. Students will pay for all accommodation and meals at SFU.
5. 学生自行承担护照、签证及其他任何相关费用。SFU 将为参加该联合培养项目的学生提供非移民学生资格证书(I-20)，用于学生申请签证。
5. Students are responsible for their passports, visas and any other related expenses. SFU will provide I-20 form, which is Certificate of Eligibility for Nonimmigrant Student Status, to students in this program for the purpose of student visa application.
6. SFU 将和 CZU 制定《课程衔接协议(Course Articulation Agreement)》（以下简称衔接协议，见附件 II），确保本项目的学生可以完成所有要求的课程。衔接协议将作为本协议的补充附件，只有在双方认可的前提下衔接协议才能实际生效。
6. SFU and CZU have developed a Course Articulation Agreement (hereinafter referred to as the Articulation Agreement, see Appendix II) so that students participating in the program can take all required courses. The Articulation Agreement will be a supplement to this Agreement and will only be effective when both parties approve it.
7. SFU 将开设所有课程衔接协议中明确的课程，以便参加本项目的学生成功获得 SFU 的石油与天然气工程理学学士学位。
7. SFU will offer all the courses identified in the Articulation Agreement so that students in this program can successfully earn the degree of Bachelor of Science in Petroleum

and Natural Gas Engineering at SFU.

8. SFU 将向 CZU 提供正式的英文成绩单。随附的成绩单中文翻译件将由 SFU 的石油工程系提供。
8. SFU will provide official English transcripts to CZU for students enrolled in this program. Petroleum and Natural Gas Engineering program at SFU will also provide the translated transcript in Chinese.
9. SFU 承认学生在 CZU 课程成绩在 70 分及以上的已修课程的学分，免修相应课程。详细详见附件 II：圣弗朗西斯大学和常州大学课程衔接协议。
9. SFU will grant credits for equivalent courses taken at CZU with grade equal or higher than 70. The equivalent courses will be waived at SFU (See Appendix II: SFU and CZU Course Articulation Agreement).
10. SFU 为优秀的 CZU 学生提供奖学金，奖学金由 SFU 招生办财政资助办公室根据学生的学业成绩决定。
10. SFU offers scholarships to outstanding CZU students. Scholarship is decided by the office of Financial Aid through Admission Office based on students' academic performance.
11. SFU 将根据录取时间，授予所有圆满完成所有学位要求和一般毕业要求的学生石油和天然气工程理学学士学位。
11. SFU will confer a degree of Bachelor of Science in Petroleum and Natural Gas Engineering on all qualified candidates who satisfactorily complete all degree requirements and general requirements for graduation in place according to the catalog year of initial enrollment.

B.常州大学同意以下几点：

B. Changzhou University agrees the following:

1. CZU 将推荐符合 CZU 录取标准并对该项目感兴趣的学生。
1. CZU will recommend students who meet the CZU admission criteria and are interested in this program.
2. CZU 将开设在课程衔接协议中确定的课程，以便学生能够成功转入 SFU 进行学习。
2. CZU will provide the courses identified in the course articulation agreement so that students can successfully transfer to SFU for study.
3. CZU 将向 SFU 提供课程大纲的英文版以确定衔接协议的条款。如果 SFU 和美国认证机构要求提供与课程相关的其它文件，CZU 将提供所需文件。
3. CZU will provide SFU with an English version of course syllabus to determine the terms of the articulation agreement. If SFU and a US certification body request other documents related to the courses, CZU will provide such documents.

3. 对学生的要求:

3. Requirements for students:

参加此项目的所有学生都必须达到以下最低要求:

All students participating in this program must meet the following minimum requirements:

1. 达到国际学生申请就读 SFU 的所有条件, 参加本项目的学生将免收申请费;
1. Meet all the SFU application requirements for international students, application fee will be waived for students in this program.
2. 达到 SFU 认可的英语语言能力要求 (至少取得托福 80 分或雅思 6.5, 详见附件 I 《英语语言能力要求说明》);
2. Meet English language proficiency requirements that are approved by SFU (TOFEL: 80 or IELTS: 6.5, details see Appendix I “English Language Requirements Explanation”).
3. 满足或超过美国政府对自身经济能力的要求;
3. Meet or exceed the US government's requirements for its financial capabilities;
4. 向 SFU 提交 CZU 的正式成绩单;
4. Submit the official CZU transcript to SFU;
5. 在 SFU 就读三年级和四年级期间, 至少修满 64 个学分, 毕业时总修 (包含从 CZU 转到 SFU 的学分) 至少达到 133 个学分;
5. Must earn at least 64 credit hours during Junior and Senior year at Saint Francis University. Total earned credit hours including transferred credits from CZU upon graduation must be at least 133 credit hours.
6. 参加此项目的学生在 SFU 就读期间, 保留在 CZU 的学籍;
6. Continue to retain student status at CZU during studying at SFU in this program;
7. 个人负责所有旅行安排和相关费用;
7. Students are responsible for all travel arrangements and related expenses;
8. 在 SFU 开始第一学期之前, 根据 SFU、州和联邦的指导方针购买健康保险 (包括遗体医疗救援和遣返);
8. Purchase health insurance (including medical rescue remains and repatriation) in compliance with SFU, state, and federal guidelines prior to the first semester of SFU;
9. 遵守 SFU、圣弗朗西斯州和美利坚合众国的所有规章和条例;
9. Comply with all rules and regulations of SFU and the United States of America;
10. 学生退学安排: 如果学生在学年结束前退出项目, SFU 将及时通知 CZU 及需要通知的 CZU 官员。
10. Student dropout plan: If the student withdraws the program before the end of the school year, SFU will promptly inform CZU and other CZU officials who need to notify.

其它:

Others:

1. 参加本项目的学生将遵守 SFU 的规则，规章和纪律要求。
1. Students participating in this program will comply with SFU's rules, regulations and disciplinary policies.
2. 本协议自双方签署之日起生效，有效期为五年。如遇下述情况，任何一方可在意向终止日前六个月书面通知另一方并在通知中指明终止日期，终止本协议。
2. This agreement will take effect from the date of signing this agreement by both parties and will be valid for five years. The agreement can be terminated by either party by giving a written notice to the other party six months prior to the date of the intentional termination and specifying the date of termination in the notice under the following circumstance:
 - a) 如果没有从联邦、州或其他来源获得资金，或者没有足够的资金继续运营本协议项下的“海外留学计划”。
 - a) If you do not receive funds from federal, state, or other sources, or if you do not have sufficient funds to continue operating the “Overseas Study Program” under this Agreement.
 - b) 如果国际，联邦或州的法律、法规被修订，更改或重新解释，使得“海外留学计划”不再被允许或适用，或者“海外留学计划”不能再使用有关资金支付该协议授权的费用。
 - b) If international, federal or state laws, regulations are modified, changed or reinterpreted, the “Overseas Study Abroad Program” is no longer permitted or applicable, or the “Overseas Study Abroad Program” can no longer use the funds to pay for the authorized agreement.
 - c) 如果法律，法规或规章要求的任何执照、许可证或证书因任何原因被拒绝，撤销，暂停或未更新的。
 - c) If any license, permit, or certificate required by law, rules or regulations is rejected, cancelled, suspended or not updated for any reason.
- 如果发生协议终止的情况，任何在协议终止前已参加该项目的学生将被允许完成其课程。
- If the termination of the agreement occurs, any student who has enrolled in the program prior to termination will be allowed to complete his or her courses.
- 任何情况下的本协议终止不影响任何一方履行在终止前已经产生的应承担的义务或责任。
- Any termination of this Agreement shall not affect any obligation or liability of any party that has accrued prior to termination.
3. 即使签署本协议，SFU 不放弃其主权豁免权或政府豁免权，并且在与本协议相关的任何诉讼中，SFU 完全保留法律规定的所有豁免和抗辩。
3. Even if this agreement is signed, SFU does not waive its sovereign immunity or government immunity, and SFU completely retains all exemptions and defenses required by law in any litigation related to the agreement.

4. 双方应充分遵守有关平等就业机会的地方、州和联邦法律。
4. Both parties should fully comply with local, state, and federal laws regarding equal employment opportunities.
5. 这是双方的全部协议。它替换并取代双方之间的所有口头协议和先前的任何书面协议。对本协议的修改和补充, 包括附表或附件, 只能在双方授权代表书面签署后执行。
5. This is the entire agreement between the two parties. It replaces and supersedes any and all verbal agreements between the parties and any prior written agreements. Modifications and additions to this Agreement, including Exhibit or Appendix, may only be executed in writing and signed by an authorized representative of both parties.
6. 随行家庭成员: 不建议父母、配偶或家属陪同学生学习。但是, 如果学生提出想要陪读的申请, 申请需要得到 SFU 的批准。SFU 将学生一方全权负责陪读的所有额外费用视为前提。
6. Family members: Parents, spouses or family members are not expected to accompany any student to study. However, in the case of a requested accompany, application needs to be approved by the SFU, and the SFU will be based on the understanding that the student is solely responsible for all the additional costs of the accompanying.

责任

Responsibility

在履行本协议的过程中, 双方应对在其职责范围内行事的其代理人、雇员或代表的不合法、疏忽行为造成的索赔、损失、损害赔偿和费用负责。本协议的任何条款均不得阻止任何一方向第三方提出根据法律可能拥有的法律责任的抗辩或者是在没有任何其他条件的情况下作为索赔或诉讼的依据。该条款在协议终止后仍然有效。

Each party shall be responsible for the losses, damages and expenses of its agents in case of the illegal or negligent acts or omissions of claims of employees or representatives who are acting within its scope of duties in the fulfill of this Agreement. Nothing in this Agreement shall prevent any party from making a defense against any legal liability that may be owned by law or as a basis for creating a claim or action without any other conditions. This clause is still valid after the termination of the agreement.

出口管制

Export control

认可并同意本协议受所有适用的美国出口管制法律和法规的管制, 控制技术信息或物品转移出美国。某些技术信息或物品的转移可能需要美国政府的许可。各方都必须遵守所有适用的出口管制法律法规, 任何一方不得出口或允许出口或再出口任何信息或物品。如果从事以上活动, 将构成违反上述法律法规的行为。

Recognizes and believes that this Agreement is governed by all applicable US export control laws and regulations, and controls the transfer of technical information or articles

from the United States. Certain technical information or the transfer of items may require permission from the US government. All parties must comply with all applicable export control laws and regulations, and neither party may export or permit the export or re-export of any information or articles. If these activities are carried out, it will constitute a violation of these laws and regulations.

SFU 协调

SFU coordination

为了达成本协议的目标，参加该项目学生的管理将由 SFU 行政办公室负责，圣弗朗西斯大学科学、技术、工程、艺术和数学学院院长作为 SFU 方联系人，常州大学石油工程学院院长作为 CZU 方联系人。

In order to achieve the objectives of this agreement, the management of visiting students participating in the program will be coordinated by the SFU Administrative Offices. Dean of the School of Science, Technology, Engineering, Arts, & Mathematics at Saint Francis University, as the contact person of SFU, and Dean of the School of Petroleum Engineering at Changzhou University as CZU Contact person.

非歧视

Non discrimination

双方同意在执行本协议时，将不会有歧视，不会违反圣弗朗西斯州大学的法律或政策。因此，将不会有基于种族，宗教，年龄，肤色，性别，残疾，性取向，性别认同，遗传信息，国籍，婚姻状况，退伍军人身份，政治信仰或政治派别，或接受公共援助的歧视。

The parties agree that there will be no discrimination in the implementation of this Agreement and will not violate the laws or policies of the Saint Francis University. Therefore, there will be no discrimination based on race, religion, age, skin color, gender, disability, sexual orientation, gender identity, genetic information, nationality, marital status, veteran status, political beliefs or political affiliation, or access to public assistance.

本协议下的任何通知应以书面形式送达双方：

Any notice under this Agreement shall be served in writing to both parties:

常州大学

石油工程学院院长何岩峰

中国江苏省常州市武进区滆湖中路 21 号，邮编：213164

Changzhou University

Yanfeng He, Dean of the School of Petroleum Engineering

No. 21, Gehu Road, Wujin District, Changzhou, Jiangsu, China, 213164

圣弗朗西斯大学

圣弗朗西斯大学科学, 技术, 工程, 艺术和数学学院院长 Pete Skoner
美国宾夕法尼亚州洛雷托市长青路 117 号, 邮编: 15940

Saint Francis University

Pete Skoner, Dean of the School of Science, Technology, Engineering, Arts, & Mathematics
117 Evergreen Drive, Loretto, PA 15940, USA

本条的条款不会取代法院任何关于索赔通知或传票送达的法规或规则。如果本条与法院的任何法规或规则发生冲突, 则以法院的法规或规则为准。

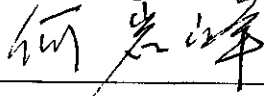
The provisions of this section do not replace any court rules or rules regarding the payment of notices or summons. If this section conflicts with any of the court's rules or rules, the court's rules or rules apply.

该协议由圣弗朗西斯大学科学、技术、工程、艺术和数学学院和常州大学石油工程学院签订。该协议签署的原件、传真或扫描件都应构成具有法律效应的可执行文件。

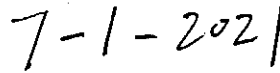
This agreement is made between the School of Science, Technology, Engineering, Arts, & Mathematics at Saint Francis University and the School of Petroleum Engineering at Changzhou University. The signed original agreement, or fax or scanned copy of the signed agreement should constitute a legally binding and executable document.

代表 Representative:

常州大学 Changzhou University



名字 Name

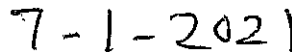


日期 Date

圣弗朗西斯大学 Saint Francis University



名字 Name



日期 Date

Appendix I English Language Requirements Explanation

Saint Francis University requires all nonnative English-speaking international applicants to submit an English competency exam score. Consideration for full admission requires that students must receive a combined score of 6.5 on the IELTS exam or 80 on the TOEFL exam. Students that do not meet the TOEFL 80 or IELTS 6.5 English proficiency can be admitted through the International Oasis Program.

TOEFL score of 65-79 or an IELTS score of 6

If the student has a TOEFL score of 65-79 or an IELTS score of 6, he/she can be admitted into a University degree program. However, to help the student be successful, the student must also participate in the International Oasis Program, which can accommodate both undergraduate and graduate pathway students. Upon arrival, Students are administered an iTEP English placement exam. This placement exam consists of a 1-hour computer-based exam, up to one hour for written composition, and a 20-minute interview. Upon completion of the exam, The Center for Academic Success reviews the exam scores. Depending on the composite scores in reading, writing, or listening/speaking, course recommendations are made to enroll in one or two GEN 3-credit courses depending on which area(s) need the most support.

International Oasis students enroll in these courses concurrently while taking academic courses in their major. Once a student begins taking courses through the International Oasis program, the student should not need additional semesters to complete his/her degree requirements and should be able to complete their degree on time. Undergraduate students in the International Oasis program are eligible to receive institutional aid and most students receive the International Excellence merit scholarship.

TOEFL score of 64 or less or an IELTS score less than 6

Students are not admitted to Saint Francis University with TOEFL scores of 64 or less or an IELTS score less than 6.

Appendix II SFU and CZU Course Articulation Agreement

This Course Articulation Agreement provides details of: 1) Petroleum and Natural Gas Engineering Curriculum at Saint Francis University
 2) Equivalent courses between CZU and SFU 3) Courses taken at CZU 4) Courses taken at SFU 5) Courses waived at SFU

Appendix II-1 Petroleum and Natural Gas Engineering Curriculum at Saint Francis University

Petroleum and Natural Gas Engineering Curriculum 2021							
Fall				Spring			
Course No.	Name	Prerequisite/Note	Credits	Course No.	Name	Prerequisite/Note	Credits
Freshman Year							
MATH 121	Calculus I	MATH 110-Pre-calculus	3	MATH 122	Calculus II	MATH 121-Calc. I	3
HIST 259	Environmental History	First semester freshman	3	PHYS 121	Physics I	Math 121 Corequisite	4
CHEM 121	Chemistry I		4	CHEM 122	Chemistry II	CHEM 121 - Chem. I	4
ENGR 101	Intro to Engineering		1	CORE 113	First Year Seminar*	Freshman Year	3
WRIT 102	Research Writing		3	GEOL 205	Physical & Structural Geology	MATH 110-Pre-calculus	3
RLST 105	Franciscan Goals for Today	Freshman Year	3	CORE 104	Community Enrichment Series		0
CORE 103	Community Enrichment Series		0	PNGE 193	PNGE Freshman Seminar		0
PNGE 192	PNGE Freshman Seminar		0				
		Total	17			Total	17
Sophomore Year							
GEOL 221	Sedimentology and Sequence Stratigraphy	GEOL 205	3	MATH 306	Diff Equations I	MATH 122	3
ENGR 201	Statics	PHYS 121	3	PHYS 122	Physics II	PHYS 121	4
PNGE 233 & 233L	Reservoir Rock & Fluid Properties	GEOL 205, MATH 121, CHEM 114	4	LIT 104**	Literature (see Gen Ed list)		3
MATH 221	Calculus III	MATH 122	3	PNGE 261	Intro to Drilling System & Drilling Fluids Lab	GEOL 221	3
ENGR 210	Programming for Engineers (Lecture + lab)	MATH 110-Pre-calculus	2	LANG XXX	Language 102+		3
PNGE 110	Petroleum Statistics Lab	MATH 110-Pre-calculus	1	ENGR 315	Mechanics of Materials	ENGR 201	2
PNGE 292	PNGE Sophomore Seminar		0	PNGE 293	PNGE Sophomore Seminar		0
		Total	16			Total	18

Appendix II-2 Equivalent Courses of Petroleum and Natural Gas Engineering between CZU and SFU

Equivalent Course at Changzhou University (CCZU)	CCZU Credits	Course Equivalency at Saint Francis University (SFU)	SFU Credits
10020051 General Chemistry	2.5	CHEM121 General Chemistry I	4
275410631 Oil Field Chemistry Fundamentals 1	3	CHEM122 General Chemistry II	4
27620021 General Introduction of Petroleum Engineering	2	ENGR101 Introduction to Engineering	1
20310083 Engineering Mechanics	4	ENGR201 Statics	3
40171-2# Fundamental of Computer and VB Program Design-1	2.5	ENGR210 Programming for the engineers	2
24070073 Fluid Mechanics	3.5	ENGR301 Fluids Mechanics	4
20710063 Basic of Mechanical Design	3	ENGR315 Mechanics of Materials	2
72430043 Mental Health Education of College Students	2	PSYC101 Introduction to Psychology	3
25010063 Foundation of Geology & Geology Summer Field Trip	2	GEOL205 Physical & Structural Geology & Geology Field Trip	3
27600041 Sedimentary petrology	2	GEOL221 Sedimentology and Sequence Stratigraphy	3
72500041 Outline of Modern Chinese History	2	HIST259 History	3
37210021 Introduction of Environmental Protection	1		
53011-2# Advanced Mathematics (2-1)	4.5	MATH121 & MATH 122 Calculus I & II	3
53011-2# Advanced Mathematics (2-1)	4.5	MATH121 & MATH 122 Calculus I & II	3
53011-2# Advanced Mathematics (2-2)	5	MATH221 & MATH 306 Calculus III & Dif. Eq.	3
53011-2# Advanced Mathematics (2-2)	5	MATH221 & MATH 306 Calculus III & Dif. Eq.	3
72410061 Ideological & Moral Cultivation & the Legal Basis	3	PHIL 311 Moral Philosophy (2nd Phil Class in lieu of Phil 307)	3
53051-2# College Physics 1	3	PHYS121 General Physics I	4
53061-2# Experiment of College Physics-1	2.5	PHYS121L General Physics I Lab.	0
53051-2# College Physics 2	3	PHYS122 General Physics II	4
53061-2# Experiment of College Physics-2	2.5	PHYS122L General Physics II Lab.	0
51010061 Probability and Mathematical Statistics	2.5	PNGE110 Petroleum Statistics Lab.	1
27010073 Petrophysics	3		
27210021 Rock Mechanics in Petroleum Engineering	2	PNGE 233& 233 L Reservoir Rock & Fluid Properties and related Labs	4
27420041 Fundamentals of Reservoir Description	2		
27180051 Introduction to Oilfield Drilling and Production Machin	1	PNGE261 Introduction to Drilling System and Drilling Fluids	3
27050043 Drilling fluid and completion fluid	2	PNGE261L Drilling Fluids Lab.	0

Appendix II-3 Expected Courses Taken in Freshman and Sophomore Year at Changzhou University (CZU)

53011-2#	Advanced Mathematics (2-1)	4.5	40171-2#	Fundamental of Computer and VB Program Design-1	2.5
53011-2#	Advanced Mathematics (2-2)	5	10020051	General Chemistry	2.5
20710063	Basic of Mechanical Design	3	27620021	General Introduction of Petroleum Engineering	2
53051-2#	College Physics 1	3	72410061	Ideological & Moral Cultivation & the Legal Basis	3
53051-2#	College Physics 2	3	72430043	Mental Health Education of College Students	2
20310083	Engineering Mechanics	4	275410631	Oil Field Chemistry Fundamentals 1	3
53061-2#	Experiment of College Physics-1	2.5	72500041	Outline of Modern Chinese History	2
53061-2#	Experiment of College Physics-2	2.5	37210021	Introduction of Environmental Protection	1
24070073	Fluid Mechanics	3.5	27010073	Petrophysics	3
25010063	Foundation of Geology	2	51010061	Probability and Mathematical Statistics	2.5
	Summer Geology Fieldtrip	2	27600041	Sedimentary petrology	2

Additional Courses Can be Taken at Changzhou University as Optional

27180051	Introduction to Oilfield Drilling and Production Machinery	1
27050043	Drilling fluid and completion fluid	2
27210021	Rock Mechanics in Petroleum Engineering	2
27420041	Fundamentals of Reservoir Description	2

*Note:

1. Students in this program can take additional courses at Changzhou University as optional.
2. If students pass the optional courses with a final grade equal or higher than 70, the credits received at CZU can be transferred to SFU.

Appendix II-4 Expected Courses Taken in Junior and Senior Year at Saint Francis University (SFU)

If all expected articulated courses are satisfactorily completed at CZU, the courses that are expected to be taken at Saint Francis University are:

	Fall		Spring		Teaching loading hours	Credits	Teaching loading hours	Credits	Teaching loading hours
	WRIT 102	Research Writing	LIT 104**	Literature	3	3	3	3	
	GEOL 321	Petroleum Geology	PNGE 381	Formation Evaluation	2	2	3	3	
	PNGE 341	Fundamentals of Reservoir Engineering	FNAR	Fine Arts Elective	3	4	3	3	
Junior Year	ENGR 321	Thermodynamics	PNGE 311	Environmental-Petroleum Engineering	3	3	3	3	
	PNGE 392	PNGE Junior Seminar	PNGE 351	Production Engineering I	1	1	3	3	
	EXAM 301	Wr Comp Exam	PNGE 261	Intro to Drilling System & Drilling Fluids Lab	0	1	7	7	
	PNGE 491	Well Stimulation Techniques	PNGE 393	PNGE Junior Seminar	3	3	1	1	
					15	17	18	23	
	PNGE 411	Economic Evaluation of Oil & Gas Properties	PNGE 436	Geophysics	3	3	3	3	
	PNGE 421	Reservoir Engineering II	PNGE498	Senior Capstone Design	3	3	3	3	
	RLST 105	Franciscan Goals for Today	PNGE 4XX	PNGE Elective 2	3	3	2	2	
	PNGE 4XX	PNGE Elective 1	CORE 407	Keystone Seminar	3	5	3	3	
Senior Year	PNGE 431	Introduction to EOR	PNGE 493	PNGE Senior Seminar	2	2	0	1	
	PHIL 205	Discovering Philosophy Reasoning and Responsibility	EPPS**	ECON,PSYC,PLSC or SOC	3	3	3	3	
	PNGE 497	Senior Project Proposal	ECON 101	Macroeconomics	1	2	3	3	
	PNGE 492	PNGE Senior Seminar	PNGE 361	Drilling Engineering I	0	1	3	4	
					18	22	18	22	

*Note:

1. If there is any course not completed at CZU, students must take those courses at SFU in addition to the expected courses shown in Appendix II-4.
2. If students have completed any optional courses at CZU (See Appendix II-3), the course credits will be transferred to SFU. Students don't need to take those transferred equivalent courses (See Appendix II-4) at SFU again.

Appendix II-5 Courses Waived in Petroleum and Natural Gas Engineering Curriculum at Saint Francis University (SFU)

Students in this program have the following courses in freshman and sophomore year waived according to Petroleum and Natural Gas Engineering Curriculum at SFU shown in Appendix II-1.

Course	Credits
PNGE 293	0
PNGE 292	0
CORE 103	0
CORE 104	0
CORE 113	3
LANG XXX	3
PNGE 192	0
PNGE 193	0