

**FORM NP: NEW DEGREE PROGRAM PROPOSAL**

Sponsoring Campus: Missouri University of Science and Technology

College or School: NA

Department: Business and Information Technology

Program Title: Bachelor of Science in Information Technology

Degree: Bachelor of Science

Option: \_\_\_\_\_

CIP Classification: \_\_\_\_\_

Emphasis areas: None

Implementation Date: Fall 2011

Expected Date of First Graduation: Spring 2013

Author of Proposal: Caroline Fisher

Name and Phone Number of Person to Contact for More Information:

Robert Schwartz, VPAA, 573-341-7887

Individual(s) Responsible for Success of Program:

Chair, Business and Information Technology

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## **Executive Summary**

This proposed degree program is designed to achieve four objectives. The first objective of this initiative is to create a degree that matches the needs of the Sri Lankan businesses. This degree will fulfill a market need for an undergraduate program in Sri Lanka in information technology, an area where local businesses express a need for more employees.

The second objective is to create a degree that does not need Association for Advancement of Colleges and Schools of Business (AACSB) accreditation, allowing American National College (ANC) in Sri Lanka to hire teaching faculty who are professionally and academically qualified but not active in research and publication to the higher level of AACSB standards. The current situation is that ANC is offering our degree (BS in IST), subject to AACSB review, and that could ultimately jeopardize Missouri S&T's accreditation application. This has already held up accreditation approval for at least one year. Faculty who meet AACSB standards are very difficult to find outside the U.S.

The third objective is to establish better name recognition for Missouri S&T in Sri Lanka and increase the number of students selecting Missouri S&T as their U.S. location for study. This goal will be achieved by increasing the number of transfer students who start their degree program in Sri Lanka and choose to complete the final portion at Missouri S&T's home campus in the U.S. A fourth objective is to generate income for Missouri S&T to help cover the expenses of maintaining and improving our programs both on campus and at a remote location.

The degree being proposed is the Bachelor of Science in Information Technology. The American National College of Colombo, Sri Lanka will provide the physical infrastructure and administrative support while also covering all salaries and operating expenses at the remote location. This degree will fulfill a market need for an undergraduate program in Sri Lanka in information technology. This program will provide the high-quality education that S&T is known for providing.

American National College currently has 12 students enrolled in our BS IST degree program now being offered there. ANC officials report that 15 to 20 students ready to enroll in this program as soon as it is approved. Based on our experience with offering the BS in Psychology, enrollment should grow rapidly. Breakeven will be reached by year three. The downside risk is minimal in that the contract requires ANC to provide adequate marketing, facilities, and faculty members for the program. We will have invested a minimal amount of funding to coordinate the program should we decide to terminate our participation in the future.

The proposed Bachelor of Science in Information Technology is a 120 credit hour program including 54 hours of general education credit. The proposed BS in Information Technology will be offered only to students who start the program in Sri

Lanka; it will not be offered to students in the U.S. Students who begin the program in Sri Lanka will be allowed to transfer to the S&T campus where they can change majors to the IST bachelor program offered on campus with no or minimal loss of credit. The major difference for these students will be that they must take four business courses for the IST degree that are not required by the IT degree.

## **1. Introduction**

The proposed Bachelor of Science in Information Technology is a 120 credit hour degree program including 54 hours of general education credit. Students are required to take 54 credit hours in information science and technology or enterprise resource planning, 54 credit hours in general education, and 12 hours of free electives. The proposed BS in Information Technology degree program will be offered only to students who start the program in Sri Lanka; it will not be offered to students in the U.S. Students who begin the program in Sri Lanka will be allowed to transfer to the S&T campus to complete the IT or the existing IST bachelor baccalaureate degree program.

S&T is currently offering its BS in Information Science and Technology to 12 students at ANC Sri Lanka. The course selection was modified to best meet the requirements of employers in Sri Lanka. The first 13 students entered into this program in January 2010; 1 student dropped out of the program, leaving 12. This program is being discontinued because it is difficult to administer within the requirements of accreditation by the Association for Accreditation of Colleges and Schools of Business (AACSB). The program in Sri Lanka has held up S&T's accreditation for at least one year. The new BS IT program will be accredited by North Central but AACSB accreditation will not be required.

The department of Business and Information Technology and its department chair are responsible for the administration of this new program.

## **2. Fit With University Mission and Other Academic Programs**

### **2.A. Alignment With Mission and Goals**

The proposed Bachelor of Science in Information Technology degree program is well aligned with the S&T mission of integrating “education and research to create and convey knowledge to solve problems for our State and the technological world.” S&T is recognized as Missouri’s technological university and is among the top five technological research universities in the U.S. A program in information technology fits directly into this mission. Information technology is critical to the efficient functioning of all organizations in their work to solve problems. It is changing constantly and is one of the fastest growing career areas around the world.

A basic component of Missouri S&T’s mission is to educate both domestic and foreign students at the undergraduate and graduate level. The portion of the education mission aimed at educating foreign students is partially met by our partnership with ANC in Sri Lanka.

Missouri S&T continually updates its strategic planning with regard to recruiting the correct mix of students that make up its total student population. A student recruitment committee chaired by the Vice Provost and Dean of Enrollment

Management and representing a broad cross section of campus constituencies meets regularly to assess the current enrollment situation and examine the impact of identified enrollment trends. This planning undertaken by this committee involves establishing recruitment plans for both graduate and undergraduate and domestic and foreign students. The need for the proposed change in student recruiting was brought about by the increasing difficulty and cost of recruiting foreign students, who are needed for two reasons.

First, current students graduate and go to work in a world that is heavily involved in international competition on all fronts. Corporate America no longer works within the confines of the US boundaries and graduates need to be exposed to other cultures. This exposure is created in part by bringing international students to the Rolla campus.

Second, there is an increasing need to boost the research capability of Missouri S&T if it is to remain competitive among its peer institutions in producing high quality research and supplying US industry with technologically capable employees. One critical component of improving Missouri S&T's research capability is increasing graduate student research capability. There is a national declining interest in science and engineering among the US student body. This declining interest creates a need to recruit more high quality foreign students to take the place of the declining domestic graduate student body. This trend is reflected not only in institutions of higher learning throughout the US but also in US high tech industry. For example: The National Science Board report for 2004 Science and Engineering Indicators and published by the National Science Foundation indicates that 56% of the engineering PhDs in the U.S. were awarded to foreign born students. Furthermore, this same report indicates that 38% of the PhD-holders in the US science and technology workforce in 2000 were foreign born.

This program is of very high priority because it will address a problem that is causing S&T to be delayed in receiving accreditation from the Association for Accreditation of Colleges and Schools of Business (AACSB). This accreditation is vital for the growth of the department of business and information technology that is part of S&T's strategic plan. The proposed degree program assists in the accreditation process of our on-campus programs while still meeting the primary (and other) purposes for S&T to offer an IT degree in Sri Lanka.

## **2.B. Duplication and Collaboration Within Campus and Across System**

This program does not exist at S&T, in the UM system, or in the state of Missouri. The program has similarities to the BS in Information Science and Technology but also has distinct differences from that program. Table 1 below compares the two degree programs.

**Table 1. Comparison of BS IT and BS IST**

<b>Degree Name</b>	<b>BS in Information Technology</b>	<b>BS in Information Science and Technology</b>
<b>Location</b>	Sri Lanka only	Rolla, MO & distance
<b>Purpose</b>	Provide technical degree to students in Sri Lanka. The marketplace needs technical competence, including programming, but is not ready for ERP or HCI, our focus areas	Provide blended degree (business & IST) to fill market niche for business analysts in U.S.
<b>Learning Goals</b>	Oral Communication Written Communication Critical Thinking Technological Competency IT Knowledge (Practical)	Oral Communication Written Communication Critical Thinking Technological Competency Teamwork <b>Business Knowledge</b> IST Knowledge (Practical and Theoretical)
<b>Business Content</b>	6 hours, 5%	21 hours, 17.5%
<b>Required Business Courses</b>	<b>None</b>	Financial Accounting Marketing Management & OB Corporate Finance Capstone
<b>Other Content</b>	54 hours General Education 27 hours of required IST courses <b>27 hours of IST electives</b> <b>No ERP courses offered</b> 12 hours of free electives	54 hours General Education 27 credit hours of required IST courses <b>9 hours of IST electives</b> <b>3 hours required ERP course</b> <b>Other ERP courses offered as electives</b> 12 hours of free electives
<b>Required IST Courses</b>	Information Systems Implementation of IS I Implementation of IS II Computer Internals Database Management Communic Networks E-Commerce Systems Analysis Web & Digital Media Dev.	Information Systems Implementation of IS I Implementation of IS II Enterprise Resource Planning Computer Internals Database Management Communic Networks E-Commerce Systems Analysis

		Web & Digital Media Dev.
<b>Marketing</b>	Marketed in Sri Lanka only	Marketed world wide

### **3. Business-Related Criteria and Justification**

#### **3.A. Market Analysis**

##### 3.A.1. Need for Program

Two types of students will be served. The first type will be those students who wish to obtain their entire degree program at the Sri Lanka location. It is expected that these will be students of lower income levels. The second type of students will be those wishing to study in the U.S. These students will either start their degree in Sri Lanka and then transfer to the U.S. or enroll directly in Missouri S&T's U.S. campus as the result of local exposure to Missouri S&T offerings. This expectation of transfer students has been validated by other US universities offering degree programs through ANC.

ANC has conducted marketing studies to determine the need for a bachelor degree in the area of information technology. It found significant need for graduates with IT skills.

The growth pattern of existing programs currently in place at the American National College provides evidence of the viability of this institution. This growth rate is shown in table 2 below.

**Table 2. Growth Pattern for All ANC Partnerships in Sri Lanka**

Fall 2003	210
Fall 2004	264
Fall 2005	282
Fall 2006	324
Fall 2007	507
Fall 2008	710
Fall 2009	752
Fall 2010	722

##### 3.A.2. Student Demand for Program

ANC has 15 to 20 students ready to enter this proposed BS in IT degree program once it is approved. It enrolled 13 students in the BS IST who started the program in spring 2010; 1 student has since dropped out of the program. ANC is in charge of student recruiting and retention. Based on our experience with offering the BS in Psychology, enrollment should grow rapidly. The numbers below are conservative



given our experience and that of Northwood University who has also partnered with ANC to offer a bachelors degree in business.

**Table 3. (FORM SE) Student Enrollment Projections Based on Market and Student Demand.**

<b>Year</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
<b>Full-Time</b>	<b>13</b>	<b>28</b>	<b>30</b>	<b>40</b>	<b>60</b>
<b>Part-Time</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>13</b>	<b>28</b>	<b>30</b>	<b>40</b>	<b>60</b>

### **3.B. Financial Projections**

See Financial Projections below and in the attached spreadsheet.

#### 3.B.1 Additional Resources Needed

S&T costs are associated primarily with reviewing the academic course structure, the selection and use of course materials and the review of student work. An on-site administrator will reside in Colombo, Sri Lanka at ANC expense. In addition to the oversight provided by this individual, an S&T IT degree representative will visit Colombo once during the academic year at an estimated cost of \$3,000. The Business and Information Technology (BIT) department will require an additional \$10,000 to cover the annual expenses of monitoring its program.

The proposed program maximizes the use of existing faculty for development and implementation. Existing S&T faculty members will provide syllabi, assignments, tests, and other teaching-related items to ANC. The S&T faculty members will assign the final grades for these courses based on the common assignments and examinations created by the S&T faculty. Recorded lectures from courses offered on campus will be made available to ANC for most courses. S&T faculty will be available for consultation to the ANC faculty.

S&T will provide oversight to insure that the courses offered are identical in content (for identical courses) and quality level to the courses offered on the S&T campus in Rolla, Missouri. This oversight will be accomplished through yearly site visits and the continual review of all course material. These materials will be collected and sent to the appropriate S&T BIT faculty member by S&T's on-site administrator at ANC. The on-site administrator will be thoroughly informed of S&T policies regarding students and faculty and will be responsible for insuring that these policies are carried out at ANC. The adherence to these policies has been made part of the contract to be signed by both parties.

Additional resources for this program will be the teaching faculty at American National College in Sri Lanka. ANC is responsible for recruiting and compensating those faculty members. Hiring is approved by the Department of Business and

Information Technology at S&T. ANC will also provide the physical facilities, computers, library books, and other necessary resources.

3.B.2. Revenue

ANC will pay S&T 12% of gross revenue collected from students enrolled in the IT degree program. ANC charges \$4,000 (US) per student per year with students usually taking 12 credit hours per semester. Student growth and revenue projections are shown in the table below and are expected to stabilize at 60 students.

Transfer students from ANC will generate additional return for S&T. Each transfer students from ANC will generate additional revenue for S&T of approximately \$38,000/year (including room and board). Northwood University of Midland, Michigan experiences a transfer rate of 1 student for every 3 to 4 students enrolled in its business degree programs at ANC. At the projected fifth year enrollment of 60 students, this would mean an additional 15 to 20 students on the S&T campus. Based on 2010-11 non-resident fees and 20 students taking a 15 credit hour load per semester this would bring in approximately \$400,000 per semester (not including the IST supplement, board, and room charge)s. Using 12-SCH semesters would yield approximately \$290,000 per semester in additional tuition revenue.

3.B.3. Net Revenue

A table summarizing the revenue and expense categories is shown immediately below and illustrates the fact that a positive cash flow is available after an initial start up period. All calculations are based on 2010-11 costs. Beyond the second year the positive cash flows provide the opportunity to return greater amounts to the departments involved, the School of Extended Learning and S&T’s general operating fund.

**Table 4. Net Revenue per Year**

Year	Enrollment	Gross Tuition	S&T Gross Income	S&T Expenses	S&T Net
1	13	\$52,000	\$ 6,240	\$13,000	(\$6,760)
2	28	\$112,000	\$ 13,440	\$13,000	\$440
3	30	\$120,000	\$ 14,400	\$13,000	\$1,400
4	40	\$160,000	\$ 19,200	\$13,000	\$6,200
5	60	\$240,000	\$ 28,800	\$13,000	\$15,800

**Table 5. Enrollment at the End of Year 5 for the Program to Be Financially and Academically Viable.**

Enrollment Status	Full-Time	Part-Time	Total
Number of Students	28	0	28

**Table 6. (FORM FP) Financial Projections for Proposed Program for Years 1 Through 5.**

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>1. Expenses per year</b>					
<b>A. One-time</b>					
<i>New/Renovated Space</i>					
<i>Equipment</i>					
<i>Library</i>					
<i>Consultants</i>					
<i>Other</i>					
<b>Total one-time</b>	0	0	0	0	0
<b>B. Recurring</b>					
<i>Faculty</i>					
<i>Staff</i>					
<i>Benefits</i>					
<i>Equipment</i>					
<i>Library</i>					
<i>Other</i>	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
<b>Total recurring</b>	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000
<b>Total expenses (A+B)</b>	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000
<b>2. Revenue per year</b>					
<i>Tuition/Fees</i>					
<i>Institutional Resources</i>	\$6,240	\$13,440	\$14,440	\$19,200	\$28,800
<i>State Aid -- CBHE</i>					
<i>State Aid -- Other</i>					
<b>Total revenue</b>	\$6,240	\$13,440	\$14,440	\$19,200	\$28,800
<b>3. Net revenue (loss) per year</b>	(\$6,760)	\$440	\$1,440	\$6,200	\$15,800
<b>4. Cumulative revenue (loss)</b>	(\$6,760)	(\$6,320)	(\$4,880)	\$1,320	\$17,120

**3.C. Business and Marketing Plan: Recruiting and Retaining Students**

American National College in Sri Lanka will provide the physical facilities (classrooms, laboratories, computers, and office space) and administrative infrastructure to support the program and cover all salaries and operating expenses at its location.

In addition, ANC will recruit students and provide financial support for the recruiting and hiring of all academic and nonacademic personnel required to support the degree offerings including, office staff, faculty and an on-site administrator. S&T will have final approval authority in the hiring of the on-site administrator and all faculty members.

The normal student satisfaction/course evaluation surveys conducted on the S&T campus will also be conducted on the ANC campus as part of the oversight function. In addition, faculty performance reviews will be conducted by the on-site administrator for all S&T programs on behalf of the S&T degree granting departments. S&T will bear the cost associated with S&T's home campus activity necessary for this oversight.

Current tuition rates are projected at \$4,000 (US) per student per year with an anticipated student body of 60 students once the program reaches steady state within five years. S&T will receive 12% of the gross proceeds collected from student tuition. This return to S&T will be split 50/50 between the central administration and the Business and Information Technology Department.

In addition to the projected revenue from ANC, it is anticipated that S&T will receive a major benefit from increased exposure in this part of the world, resulting in a greater number of applications from students wanting to receive undergraduate and graduate degrees from S&T's home campus in the U.S. Northwood University of Midland, Michigan currently has a business degree program in cooperation with ANC and experiences a transfer rate of 1 student for every 3 to 4 students enrolled in its degree programs at ANC.

All marketing of the program will be handled by American National College (ANC) in Sri Lanka. It is already operating: recruiting students, educating students, and placing graduates. S&T will provide ANC with sets of its promotional materials for modification at its discretion.

Existing competition in the Sri Lanka market is very limited. The public university can only provide higher education for five percent of the qualified high school graduates. The country lacks programs in information technology so we will have no real competition for this program.

#### **4. Institutional Capacity**

S&T Faculty members will coordinate the courses at ANC. This is expected to require about 2% of their total semester work time per course. This does place an additional load on the department faculty, but the load is less than what the existing program (BS in Information Science and Technology) requires of them. The full-time faculty equivalent grows from 12% in the first year to 36% in the second.

**Table 7. Possible Schedule of IT Courses for ANC Sri Lanka**

Semester	Course	Instructor	Cohort
Fall 1	Information Systems	Yu-Hsien Chiu	1
Spring 1	Implementation of IS I	Dr. Mike Hilgers	1
Summer 1	Implementation of IS II	Dr. Mike Hilgers	1
	Web & Digital Media Design	Richard Hall	1
	Computer Internals	Dr. Barry Flachsbart	1
	Information Systems	Yu-Hsien Chiu	2
Fall 2	Telecommunications Networks	Staff	1
	Database Management	Dr. Barry Flachsbart	1
	Human Computer Interaction	Dr. Hong Sheng	1
	Implementation of IS I	Dr. Mike Hilgers	2
Spring 2	Systems Analysis	Dr. Vincent Yu	1
	Modular Software Systems	Matt Becker	1
	E-Commerce	Staff	1
	Implementation of IS II	Dr. Mike Hilgers	2
	Web & Digital Media Design	Richard Hall	2
	Computer Internals	Dr. Barry Flachsbart	2
Summer 2	Multi-Media Development	Dr. Richard Hall	1
	Law & Ethics in E-Commerce	Eric Anderson	1
	Database Apps in Business		1
	IS Project Management	Dr. Barry Flachsbart	1
	Systems Analysis	Dr. Vincent Yu	2
	Modular Software Systems	Matt Becker	2
	E-Commerce	Staff	2
	Information Systems	Yu-Hsien Chiu	3
Fall 3	Advanced Networking	Staff	1
	Adv. Digital Media	Dr. Richard Hall	1
	Network Performance Design	Staff	1
	Telecommunications Networks	Staff	2
	Database Management	Dr. Barry Flachsbart	2
	Human Computer Interaction	Dr. Hong Sheng	2
	Implementation of IS I	Dr. Mike Hilgers	3
Spring 3	Multi-Media Development	Dr. Richard Hall	2
	Database Apps in Business		2
	IS Project Management	Dr. Barry Flachsbart	2
	Implementation of IS II	Dr. Mike Hilgers	3
	Web & Digital Media Design	Richard Hall	3
	Computer Internals	Dr. Barry Flachsbart	3

## 5. Program Characteristics (FORM PS)

### 5.A. Structure

The program is structured after the Bachelor of Science in Information Science and Technology, except no business courses or Enterprise Resource Planning (ERP) courses are required and the ERP emphasis is not offered. The program includes 54 credit hours in general education, 54 credit hours in Information Science and Technology or Enterprise Resource Planning, and 12 hours of general electives, for a total of 120 credit hours.

1. Total credits required for graduation: 120 credit hours
2. Residency requirements, if any: Last 60 credit hours restricted to S&T.
3. General education (Provided by Patton University.)

Total credits for general education courses: 54

**Table 8. General Education Courses:**

Course	Hrs	Course	Hrs	Course	Hrs
Speech or Tech Com Elective	3	Fine Arts, Social Sciences, or Humanities Elec.	6	College Algebra	3
Practicum in Tech Com	3	History Elective	3	Business Calculus	4
Psychology	3	Micro Economics	3	Statistics I	3
Principles of Speech	3	Macro Economics	3	Science Elective	3
Exposition & Argumentation	3	American Government	3	Science Elective with Lab	4
Intro to Tech Com	3	Intro to College Success	1		

These courses have been preapproved through an articulation agreement with Patton University. Transfer of the credits is handled by the Registrar's office when the students apply for the IT program.

4. Major requirements

Total credits specific to degree: 54

**Table 9. Major Courses:**

Course	Hrs	Course	Hrs	Course	Hrs
Information Systems	3	Implementation of IS	6	Database Management	3
Computer Internals	3	Telecommunications Networks	3	E-Commerce	3
Systems Analysis	3	Web & Digital Media Development	3	IST Electives	27

5. Free elective credits

Total free elective credits: 12

6. Requirement for thesis, internship or other capstone experience: None

7. Any unique features such as interdepartmental cooperation:

The general education courses will be provided by Patton University on the ANC campus. As stated above, the courses are part of an existing articulation agreement.

## **5.B. Faculty and Administration (FORM PG)**

### Administration

Caroline Fisher, Ph.D., Chair, Department of Business and Information Technology  
(3% of time year round)

### S&T Faculty

Eric Anderson, JD, Adjunct Faculty  
Yu-Hsien Chiu, Assistant Teaching Professor  
Craig Claybaugh, Ph.D., Assistant Professor  
Scott Dalton, Adjunct Faculty  
Barry Flachsbart, Ph.D., Professor  
Richard Hall, Ph.D., Professor  
Mike Hilgers, Ph.D., Professor  
Bih-Ru Lea, Ph.D., Associate Professor  
Hong Sheng, Ph.D., Assistant Professor  
Vincent Yu, Ph.D., Associate Professor

All S&T faculty members must have at least a masters degree with five years of professional experience or a doctorate in the area of teaching. These faculty members will oversee the classes taught at American National College, including providing materials, collecting and evaluating assignments for outcomes assessment, checking grading, and verifying final grades. Each course will require about 2% of a faculty member's time for the semester in which it is taught.

### **ANC Faculty**

Shantha Jayalal, Ph.D.  
Kapila Ponnampereuma, Ph.D.  
Keerthi Wijayasiriwardhane, Ph.D.  
Ruwan Wickramarachichi, Ph.D.

All ANC faculty members must have at least a masters degree with five years of professional experience or a doctorate in the area of teaching.

All courses will be taught by ANC faculty members in conjunction with S&T faculty members. S&T faculty members will be responsible for the syllabus, textbooks, assignments, and examinations.

### **5.C. Student Preparation (FORM PG)**

All ANC students must meet the requirements for admission to Missouri University of Science and Technology. Admissions are handled through S&T's Registrar. Students in Sri Lanka have limited choices for a college education. The public university can only handle about five percent of the Sri Lankan students qualified to attend a university.

### **5.D. Program Outcomes (FORM PG)**

#### Learning Outcomes

- Students will be able to write professionally.
- Students will be able to make a professional presentation.
- Students will be able to make a satisfactory score on the Business Critical Thinking Skills test.
- Students will be able to work well in teams to accomplish an objective.
- Students will be able to demonstrate technical skills appropriate to the degree program.
  - Analyze problems, and identify and define the computing requirements appropriate to the solution.
  - Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
  - Use current techniques, skills, and tools necessary for computing practice.

Learning outcomes are assessed through assignments given in classes with the exception of the last learning outcome, which is assessed through use of a senior assessment exam. This exam was written by the IST faculty. The same assignments will be used for this program as are currently used for the BS in IST offered on the S&T campus.

### **5.E. Program Design and Content (FORM PG)**

The program was designed based on the Bachelor of Science in Information Science and Technology currently offered on S&T's campus and now offered to 12 students in Sri Lanka. Program requirements were modified to meet local workplace needs and to assure that the program could be waived from S&T AACSB accreditation.

The courses included in this program are a subset of the courses offered for the BS in IST on S&T's campus. The prerequisites and sequences are the same. No courses are unique to this program.



### **5.F. Program Goals and Assessment (FORM PG)**

The following program goals will be measured and tracked by ANC and by Dr. Henry Wiebe , Vice Provost and Dean, Missouri S&T.

- Expect 90% placement rates in related fields.
- Expect 25 to 33 percent to transfer to Missouri University of Science and Technology campus.
- Expect 5 percent to continue on to the MS in IT.
- Build reputation of S&T in the Southeast Asia region.

### **5.G. Alumni and Employer Survey (FORM PG)**

- Expect 80% satisfaction at 2, 7, and 12 years from graduation with e-survey.
- Expect 80% satisfaction rates from employers 1 year after hire using e-survey.

### **5.H. Program Accreditation (FORM PG)**

ABET cac accreditation will be sought for this program.

## **Appendix A**

### **Existing Contractual Relationship with ANC**

In any relationship of the type described above, the two partners have distinct and separate yet complementary responsibilities. These are split as described below

#### **S&T shall be responsible for the following:**

- a) To provide oversight of academic administration and instruction for all its Degree Programs and educational courses.
- b) To be in full control with regard to the approval of all academic courses for which it offers credit, approval of the appointment of faculty and academic staff, and consulted on the termination of faculty and academic staff. S&T shall consult with ANC where necessary on the matters set out in this clause.
- c) To provide support to coordinate the collaboration between S&T and ANC.
- d) To provide oversight and approval for the hiring of competent and professionally prepared faculty to teach S&T courses at ANC.
- e) To prepare a curriculum sequence and publish a schedule of courses in consultation with ANC to be offered at ANC, projected for a minimum of two academic years.
- f) To provide course syllabi and to select textbooks for all S&T's courses.
- g) In collaboration with ANC, be consulted with regard to establishing the beginning and ending dates of each semester. The number of contact hours required for each course shall be the responsibility of S&T and shall be in keeping with the accepted standards for US Colleges and Universities.
- h) To develop, establish and conduct assessment policies and practices to ensure the academic integrity and quality of S&T's courses at ANC.
- i) To approve the appointment of all academic personnel. Other non-S&T administrative staff employed by ANC shall be the sole responsibility of ANC.
- j) To coordinate with ANC to ensure that necessary materials and textbooks are available to students for purchase in a timely manner.
- k) To approve the appointment of an individual who will serve as an academic administrator, (with a title to be designated by S&T), to be responsible for S&T's Programs at ANC.
- l) To establish admissions requirements, course registration procedures, and provide transcripts for completed S&T courses.
- m) To advise students with regard to course selection and transfer of S&T's credits to S&T (USA).
- n) To send a representative from the S&T campus to ANC a minimum (it is S&T's intention to conduct quarterly onsite visits) of twice each year to

- meet with faculty and review and assess matters related to S&T's course offerings and student related administration matters.
- o) To approve all promotional literature for S&T courses.
  - p) To obtain prior approval in writing from ANC for any expenditure for which S&T expects to be reimbursed not covered in this agreement (e.g.: travel, providing promotional materials, advertising for academic personnel, etc.).
  - q) To list ANC as a S&T extension site in its official university website and catalogues. ANC shall cooperate with S&T to provide the necessary logistical support to establish a hyperlink between the S&T and ANC websites and to provide S&T students ID cards for students enrolled in the ANC campuses in S&T programs. {This has been completed.}
  - r) To provide registered students of ANC access to S&T's virtual libraries. S&T shall in this respect provide ANC with the necessary passwords and other access information. ANC shall bear the responsibility if there are additional costs for these services.
  - s) To instruct and assist ANC as it seeks to develop educational resources to support students by providing the necessary information with regards to the requirements for a fully equipped library and Science/IT laboratories.

**ANC shall be responsible for the following:**

- a) To attain required authorization to offer S&T courses from the related government authorities or agencies responsible for educational programs in Sri Lanka, India and the Sub-Continent. {This has been completed.}
- b) To operate ANC in compliance with all applicable local laws, regulations and codes, including the procurement of permits and licenses when needed, in the performance of this Agreement.
- c) To provide the financial resources to create and maintain a high quality educational facility that will satisfactorily support S&T's academic course offerings.
- d) To market and promote S&T's courses and Programs including the design and publication of accurate promotional materials. It is understood that final approval of all published materials related to S&T's courses is subject to advance written approval from S&T.
- e) To recruit qualified students from Sri Lanka and the surrounding region who meet the admission policies and standards required by S&T.
- f) To provide technological and library resources needed to support S&T's courses. S&T shall provide ANC with the requisite specifications and assist ANC towards the establishment of facilities that meet the educational needs of students.
- g) To provide financial resources and supervise all academic personnel and non-academic administration and support services needed to facilitate S&T's academic courses and Programs at ANC.
- h) To provide the financial resources and processes, whereby all salaries for faculty and administrative staff, and bills for both non-academic and

academic functions required to facilitate a quality academic program at ANC will be paid.

- i) To staff and supervise ANC's admissions department as it relates to student recruitment and marketing of S&T's courses and Programs at ANC.
- j) To maintain complete and accurate financial information and student records for ANC. ANC shall provide S&T with reports each semester showing in accurate detail ANC income and expenses pertaining to the tuition, academic staff and faculty compensation and benefits and any other income or expense that is related to S&T courses and Programs. ANC shall deliver written reports to S&T's designated personnel, and ANC shall respond fully and promptly to all inquiries of S&T as to the status of ANC. All inquiries in this respect shall be directed to the Executive Director of ANC.
- k) To undertake all activities at ANC in accordance with S&T academic policies as stated in the S&T Faculty Handbook, copies of which are attached hereto, as the same may be amended from time to time provided that ANC is kept aware of such amendments within a reasonable period of time of it occurring.
- l) To disseminate and support the S&T policies contained in the University Policies and Student Discipline of the S&T Student Handbook.
- m) To be responsible for hiring, training, compensating, evaluating and terminating when necessary, of all personnel.
- n) To implement S&T registrar, records and admissions policies and procedures which may be amended from time to time by both parties by mutual consent.
- o) To remit to S&T all student admission, enrollment and registration material after the ADD/DROP period of the semester for which students are enrolling.

**Joint responsibilities:**

- Provide oversight of academic administration
- Development of recruiting materials for faculty and students (S&T to give guidance)
- Recruiting faculty (S&T to provide hiring approval)
- Recruiting students (S&T to provide suitable information on its home web site)
- Enrolling students (S&T to provide minimum standards for acceptance)

ANC will pay S&T 12% of gross revenue collected from students enrolled in the IST degree program. It is planned to charge \$4,000 (US) per student per year. Student growth and revenue projections are shown in the table below and are expected to stabilize at 100 students.

S&T costs are associated primarily with reviewing the academic course structure, the selection and use of course materials and the review of student work. An on-site

administrator will reside in Colombo. In addition to the oversight provided by this individual, it will be desirable for an S&T IT representative to visit Colombo once during the academic year at a cost of \$3,000. The Business and Information Technology department will require \$10,000 (in addition to the \$3,000 visit cost) to cover the expenses of monitoring its program.

## APPENDIX B

### Comparison of courses for the BS IST and the BS IT

<b>On-Campus BS IST Student Courses</b>	<b>ANC Sri Lanka BS IST Student Courses</b>
<b>BUS 10/11</b>	<b>Waived</b>
Psych 50	Psych 50
Science elective	Science elective
Science elective	Science elective
Science lab elective	Science lab elective
Fine art, social science or humanities elective	Fine art, social science or humanities elective
Fine art, social science or humanities elective	Fine art, social science or humanities elective
History elective	History elective
Microeconomics	Microeconomics
Macroeconomics	Macroeconomics
American Government	American Government
College algebra	College algebra
Business calculus	Business calculus
Statistical tools for decision making	Statistical tools for decision making
Principles of speech	Principles of speech
Exposition & argumentation	Exposition & argumentation
Intro to technical communication	Intro to technical communication
Speech or technical communication elective	Speech or technical communication elective
Practicum in technical communication	Practicum in technical communication
Information systems	Information systems
Implementation of information systems I	Implementation of information systems I
Implementation of information systems II	Implementation of information systems II
<b>Introduction to enterprise resource planning</b>	<b>Modular software systems in Java</b>
<b>Management and organizational behavior</b>	<b>Human-Computer Interaction</b>
<b>Financial accounting</b>	<b>Multi-Media Development</b>
<b>Corporate finance</b>	<b>Law &amp; Ethics in E-Commerce</b>
<b>Marketing</b>	<b>Database Apps in Business</b>
<b>Senior design I &amp; II</b>	<b>Advanced Networking</b>
Database management	Database management
Computing internals and operating systems	Computing internals and operating systems
Telecommunications and Networks	Telecommunications and Networks
E-commerce	E-commerce
Systems analysis	Systems analysis
Web and new media design & development	Web and new media design & development
<b>IST elective</b>	<b>Adv. Digital Media</b>
<b>IST elective</b>	<b>Information systems project mgmt</b>
<b>IST elective</b>	<b>Network performance design &amp; mgmt</b>
Elective	Elective
Elective	Elective
Elective	Elective
Elective	Elective