



## Sri Lanka Institute of Information Technology (SLIIT), Malabe, Sri Lanka and Wichita State University, Wichita, Kansas, USA 2+2 Agreement

### Introduction

The purpose of this 2+2 Agreement is to provide Sri Lanka Institute of Information Technology's (SLIIT) students a four-year coordinated program where students will complete the first two years of curriculum at SLIIT and transfer to the Bachelor of Science degree program in Engineering Technology or Industrial Engineering at Wichita State University (WSU). This agreement will provide guidance for both parties in advising students. This 2+2 agreement parallels a more detailed document with addenda that establishes an inter-institutional cooperative partnership between WSU and SLIIT.

This partnership reflects the following objectives, institutional expectations, and operational principles:

- Expanded student program opportunities, course articulation understandings, and transfer coordination considered mutually beneficial in this coordinated partnership.
- Graduates will possess the technical skills and conceptual background, creative mindset and applied experiences to adciress
  the workforce needs for achieving the desired economic development in the State of Kansas.
- All students will complete all major, institutional (e.g., general education and Engineer of 2020), and required professional ABET accrediting requirements (where applicable) appropriate to the program curricula both at SLIIT and WSU.
- Both SLIIT and WSU's College of Engineering program faculty and administrators will promote the program with qualified prospective students and share assessment of learning outcomes towards the goal of program improvement.
- Students transferring to WSU from SLIIT who may not have completed all courses outlined in this agreement must meet the necessary requirements for admission to WSU, and will have their transcript evaluated on an individual basis.

In order to ensure a successful transition and completion of the bachelors' degree at WSU, students should refer to the required degree plans or stipulations of this agreement. All courses designed in this agreement have required pre-requisites/co-requisites that enhances the easy transition onto the next set of courses based on sequencing and offering of courses. Transfer students must complete at least 60 hours of four-year college work, no less than 45 hours of upper-division work, and no less than 30 hours of coursework at WSU (with at least 24 of last 30 (or 50 of last 60 hours) at WSU) in order to qualify for graduation from Wichita State University.

The first cohort of students will be admitted in the Spring 2018 or a later semester and will allow students. SLHT will be responsible to provide individual students' transcripts.

### **Objectives of the Inter-Institutional Partnership**

Among the objectives of the partnership are the following:

- To provide an additional pathway for prospective students to matriculate in a program with the College of Engineering at WSU;
- > To thereby facilitate the transition of students from SLIIT to WSU;
- To encourage academic and administrative coordination between the partnering universities, and to the exchange of evaluative information on the outcomes of the programs and program students toward the goal of continual improvement at the partnering universities; and
- To address the Science, Technology, Engineering, and Mathematics (STEM) workforce development needs for the desired economic development in the State of Kansas as well as in Sri Lanka.
- > To future discussions on possible opportunities for collaborative research and/or joint program delivery.

#### Institutional Expectations

SLIIT students will satisfy the following requirements:

- At least one year in residence at SLIIT
- > Satisfactorily completed a defined curriculum covered through this agreement at SLIIT
- Achieved a minimum cumulative GPA of 2.0 out of 4.0 or equivalent (excluding English courses
- Demonstrate proficiency in English (please refer to the current guidelines available through the Office of International Education at WSU)
- Applied for admission to WSU

SLIIT students meeting the above requirements will (subject to a limit of 50 students under this agreement at any given time):

- Be guaranteed admission to WSU with completion of application requirements and receipt of transcripts.
- Be guaranteed to transfer all credit hours per the transfer course agreement but not exceeding 90 credit hours from SLIIT with an earned grade of a C or better.

Students in the Wichita State University's degree-bound program will satisfy the WSU requirements including:

- > Take at least 12 credit hours of coursework during the Fall and Spring semesters
- VISA, medical insurance, and financial responsibility requirements for international students
  - o Students will be responsible for providing appropriate documentation

The prerequisite requirements will be met by WSU-approved course equivalents at SLIIT or enrollment in the respective WSU course(s). The transfer courses applicable to the curricula covered by this Memorandum are specified in the complementing WSU-SLIIT Articulation Agreement that accompanies the Memorandum. WSU and SLIIT will jointly review these prescribed plans every three years, at minimum, and revise them as needed to reflect changes in course requirements. If SLIIT makes changes to existing syllabi for their courses under this agreement or needs to add new classes to the program, SLIIT will provide WSU with syllabi so that transfer equivalencies can be determined.

### **Program Costs**

Students will be responsible for all expenses including but not limited to the following:

- Application fee\*
- Tuition and fees
- > Housing (if applicable) and meals
- Books (estimated as \$600 per semester)
- Medical Insurance (estimated as \$600 per semester)

#### \*Application fee

WSU offers three levels of service when a student applies for admission:

Premium (\$250): 3 business days for processing with admission documents sent by DHL courier service Standard (\$150): 2 to 3 weeks for processing with admission documents sent by DHL courier service Basic (\$75): 5 to 6 weeks for processing with admission documents sent by airmail

#### **Program Promotion**

The partnering institutions agree to encourage qualified students to participate in the 2+2 transfer program at WSU through advising and dissemination of information. The SLITT advisor(s) will make efforts to maintain a roster of students intending to pursue this option at WSU, and share that as requested.

#### **Confidentiality of Student Information and Records**

SLIIT and WSU administrators and faculty possessing a legitimate need to know concerning current or prospective students' program-related information will share that. Pursuant to that, SLIIT and WSU faculty, staff, and/or administrators agree to keep current or prospective student records private per Federal Educational Rights to Privacy Act (FERPA) regulations. FERPA guidelines

will pertain consistent with the official responsibilities of the SLIIT and WSU faculty, staff, and/or administrators involved in the administration and delivery of the respective institutional partner programs.

Any information garnered pursuant to the Assessment of Program Outcomes germane to the respective programs of the university partners will be shared, also. This may include formative and summative assessments, but particularly findings from exit surveys and/or exit interviews administered at the respective universities.

#### **Modification of Agreement**

This agreement shall only be modified in writing with the same formality as the original agreement.

### **Terms of Agreement**

The agreement will begin with the 2017-2018 academic year with no pre-planned end date.

The agreement limits the number of students through this agreement between 20 and 50 students at any given time. Deviation from this requirement may be considered but must be approved beforehand.

#### **Termination of Agreement**

Either party may terminate this agreement for any reason with a written notice from either party. At the time of termination of this agreement, students (whether at SLIIT or at WSU) who are already admitted and pursuing their degrees will not be affected.

This agreement is a collaboration between Wichita State University and Sri Lanka Institute of Information Technology. Any changes, corrections, of additions to this agreement shall be in writing and signed by all necessary parties between both academic institutions.

### On Behalf of the Partnering Institutions,

Dr. Anthony J. Vizzini

Provost and Senior Vice President Wichita State University Wichita, Kansas, USA

Dr. Aoyce Bowden Dean College of Engineering Wichita State University

Dr. Krishna K Krishnan Chair and Professor Industrial, Systems, and Manufacturing Engineering

Dreary Brooking Director Engineering Technology

Prof. Lalith Gamage Vice Chancellor/Chief Executive Officer Sri Lanka Institute of Information Technology Malabe, Sri Lanka

# Engineering Technology-Mechatronics Technology (2+2) Bachelor of Science Pathway Sri Lanka Institute of Information Technology (SLIIT) & Wichita State University (WSU) Courses taken at SLIIT

| Wichita State University Equivalent   | SUIT   | Hours  |
|---|--|--------|
| PHYS 213 General Physics I  | Satisfied by completion of GCE Advance Level<br>Certificate in Physics                       | 5      |
| ENGT 312 Applied Statics  | CE 1010 Engineering Mechanics  | 3      |
| ENGT 320 Circuits Technology  | EC 1020 Electrical Systems   | 4      |
| MATH 242 Calculus I   | MA 1300 Engineering Mathematics I  | 5      |
| ENGL 101 College English I  | EL 1200 English Language Skills I (Credit after<br>completion of Exit Exam at WSU)           | 3      |
| Freshman – 2 <sup>nd</sup> Semester (T  | aken at SLIIT) 20 Credit Hours   |        |
| IME 222 + IME222L Engineering Graphics & Graphics Lab   | ME 1030 Engineering Skills Development   | 3      |
| ENGR 101- Introduction to Engineering (satisfies following requirement: Technical Elective)                       | ME 1010 & ME 1040 Engineering Design &<br>Process/Engineering Principles &<br>Communication) | 3+3 TE |
| ME 250-Materials Engineering (satisfies following<br>requirement: Technical Elective)                             | MT 1010 Engineering Materials  | 3      |
| MATH243 (satisfies following requirement: MATH 252<br>Technical Calculus II)                                      | MA 1310 Engineering Mathematics II   | 5      |
| ENGL 102 College English II   | El 1210 English Language Skills II (Credit after completion of Exit Exam at WSU)             | 3      |
| Sophomore – 1ª Semester (1  | Faken at SLIIT) 16 Credit Hours  |        |
| ENGT 323 Introduction to Fluids   | CE 2710 Fluid Mechanics  | 3      |
| ENGT 348 Machine Elements   | ME 2020 Mechanics of Machines I  | 3      |
| Satisfies following requirement: Technical Elective   | ME 2030 Engineering Drawing  | 3      |
| MATH 344-Calculus III (satisfies following requirement:<br>Technical Elective)                                    | MA 2300 Engineering Mathematics III  | 3      |
| CS217 (satisfies following requirement: CS 211 or MIS 310<br>Intro to Programming or Fund. of Business App. Dev.) | CS 101E Intro Programming Environment<br>(C++/UNIX)  | 4      |
| Sophomore – 2 <sup>nd</sup> Semester (1   | Taken at SLIIT) 16 Credit Hours  |        |
| ME 398-Thermodynamics I (satisfies following<br>requirement: Technical Elective)                                  | ME 2040 Thermodynamics   | 3      |
| ENGT 334 Intro to Strength & Mechanics of Materials   | ME 2050 Mechanical Design I  | 3      |
| IME 258 Manufacturing Methods I   | ME 2060 Manufacturing Processes  | 3      |
| ENGT 497 Electrical Machines & Electronic Circuits  | ME 2090 Electrical Plant   | 4      |
| ENGT 360-Renewable Energy Technology (satisfies<br>following requirement: Technical Elective)                     | ME 1020 Intro to Renewable Energy  | 3      |

\*(Includes extra technical elective to cover hours for MATH111 and MATH123 that are waived.) A total of 72 credit hours taken at SLIIT towards completion of Bachelor of Science Degree

# Engineering Technology-Mechatronics Technology (2+2) Bachelor of Science Pathway Sri Lanka Institute of Information Technology (SLIIT) & Wichita State University (WSU) Courses taken at WSU

| Wichita State University Requirement  | Hours |
|---|-------|
| ENGT 301 Fundamentals of Engineering Technology (Can be completed online right before coming to WSU or can be completed in the summer after the first year at WSU. Must be completed before ENGT401.) | 3     |
| Approved General Education (H/FA/S&BS) as found on the WSU Course Catalog   | 3     |
| COMM 111 Public Speaking  | 3     |
| C5 194 Introduction to Digital Design   | 4     |
| IME 255 Engineering Economy   | 3     |
| ENGT 313 Applied Dynamics   | 1     |
| Engineer of 2020 Requirement (1 of 3)   |       |
| Junior – 2 <sup>nd</sup> Semester (Taken at WSU) 14 Credit Hours  |       |
| Approved General Education (H/FA/S&BS) as found on the WSU Course Catalog   | 3     |
| Approved General Education (H/FA/S&BS) as found on the WSU Course Catalog   | 3     |
| ENGT 354 Statistical Process Control  | 3     |
| PHYS 214 General College Physics II or CHEM 211 General Chemistry I   | 5     |
| Engineer of 2020 Requirement (2 of 3)   |       |
| Senior – 1 <sup>#</sup> Semester (Taken at WSU) 13 Credit Hours   |       |
| Approved General Education (H/FA/S&BS) as found on the WSU Course Catalog: Recommended: ECON 201 Principles of Macroeconomics   | 3     |
| Approved General Education (H/FA/S&BS) as found on the WSU Course Catalog: Recommended: PSY<br>111 General Psychology or SOC 111 Introduction to Sociology  | 3     |
| ENGT 361 Industrial Control and Instrumentation   | 4     |
| ENGT 401 Senior Design Project I  | 3     |
| Engineer of 2020 Requirement (3 of 3)   |       |
| Senior – 2 <sup>nd</sup> Semester (Taken at WSU) 12 Credit Hours  |       |
| ENGT 410 Robotics Technology  | 3     |
| ENGT 411 Micro-based Mechanical Systems Technology  | 3     |
| ENGT 402 Senior Project Design II   | 3     |
| PHIL 385 Engineering Ethics   | 3     |

A total of 56 credit hours taken at Wichita State for the completion of the B.S. degree in Engineering Technology-Mechatronics Technology

# Industrial Engineering (2+2) Bachelor of Science Pathway Sri Lanka Institute of Information Technology (SLIIT) & Wichita State University (WSU) Courses taken at SLIIT

| Freshman – 1 <sup>#</sup> Semester (T   | aken at SLIIT) 14 Credit Hours  |         |
|---|---|---------|
| Wichita State University Equivalent   | SLIT  | Hours   |
| ECON 201 (satisfies following requirement: Gen Ed –<br>Social/Behavioral Science Introductory Course + 3 extra<br>hours to be used towards Technical Electives) | Satisfied by completion of GCE Advance Level<br>Certificate in Economics            | 3+3 TE* |
| MATH 242 Calculus I   | MA 1300 Engineering Mathematics I   | 5       |
| ENGL 101 College English I  | EL 1200 English Language Skills I (Credit after<br>completion of Exit Exam at WSU)  | 3       |
| Freshman – 2 <sup>nd</sup> Semester (T  | aken at SLIIT) 14 Credit Hours  |         |
| IME 222 + IME222L Engineering Graphics & Graphics Lab   | ME 1030 Engineering Skills Development  | 3       |
| ME 250-Materials Engineering (satisfies following requirement: Technical Elective)  | MT 1010 Engineering Materials   | 3       |
| MATH 243  | MA 1310 Engineering Mathematics II  | 5       |
| ENGL 102 College English II   | El 1210 English Language Skills II (Credit after<br>completion of Exit Exam at WSU) | 3       |
| Sophomore – 1# Semester (   | Taken at SLIIT) 12 Credit Hours   |         |
| STAT 460 (Satisfies following requirement: IME 254<br>Engineering Probability and Statistics I)   | MATH 101B Probability & Statistics  | 4       |
| Satisfies following requirement: Technical Elective   | ME 2030 Engineering Drawing   | 3       |
| CS217 (satisfies following requirement: CS 211 or MIS 310<br>Intro to Programming or Fund. of Business App. Dev.)   | CS 101E Intro Programming Environment<br>(C++/UNIX)                                 | 4       |
| Satisfies following requirement: Technical Elective   | BM 2070 Leadership and Teamwork   | 1       |
| Sophomore – 2 <sup>nd</sup> Semester (  | Taken at SLIIT) 12 Credit Hours   |         |
| Satisfies following requirement: Technical Elective under<br>ISME tracks  | BM 2080 Operations and Supply Chain<br>Management                                   | 3       |
| Satisfies following requirement: IME 556 Information<br>Systems   | BM 2090 Business Information Systems  | 3       |
| MATH 344-Calculus III (satisfies following requirement:<br>Math and Natural Technical Elective)   | MA 2300 Engineering Mathematics III   | 3       |
| IME 258 Manufacturing Methods I   | ME 2060 Manufacturing Processes   | 3       |

\*(Includes extra hours to be used towards technical elective category requirement.) A total of 52 credit hours taken at SLIIT towards completion of Bachelor of Science Degree

# Industrial Engineering (2+2) Bachelor of Science Pathway

# Sri Lanka Institute of Information Technology (SLIIT) & Wichita State University (WSU) Courses taken at WSU

| Wichita State University Requirement  | Hours  |
|---|--------|
| PHYS 313 Physics for Scientists I   | 4      |
| IME 255 Engineering Economy   | 3      |
| IME 553 Production Systems  | 3      |
| COMM 111 Public Speaking  | 3      |
| MATH 511 Linear Algebra   | 3      |
| Approved General Education (S&BS) as found on the WSU Course Catalog: Recommended: PSY 111<br>General Psychology or SOC 111 Introduction to Sociology | 3      |
| Engineer of 2020 Requirement (1 of 3)   |        |
| Junior — 2 <sup>nd</sup> Semester (Taken at WSU) 18 Credit Hours  | 2. 建雄胶 |
| IME 452 Work Systems  | 3      |
| IME 524 Engineering Probability and Statistics II   | 3      |
| IME 549 Industrial Ergonomics   | 3      |
| IME 550 Operations Research   | 3      |
| IME 554 Statistical Quality Control   | 3      |
| IME 565 Systems Simulation  | 3      |
| Engineer of 2020 Requirement (2 of 3)   |        |
| Senior – 1 <sup>st</sup> Semester (Taken at WSU) 20 Credit Hours  |        |
| CHEM 211 General Chemistry I  | 5      |
| Approved General Education (H/FA) as found on the WSU Course Catalog  | 3      |
| Approved General Education (H/FA) as found on the WSU Course Catalog  | 3      |
| IME 563 Facilities Planning and Design  | 3      |
| IME 650 Operations Research II  | 3      |
| IME 590 Industrial Engineering Design I   | 3      |
| Engineer of 2020 Requirement (3 of 3)   |        |
| Senior — 2 <sup>nd</sup> Semester (Taken at WSU) 19 Credit Hours  | 1 6 5  |
| PHYS 314 Physics for Scientists II  | 4      |
| ISME track based technical elective   | 3      |
| ISME track based technical elective   | 3      |
| IME 690 Industrial Engineering Design II  | 3      |
| PHIL 385 Engineering Ethics   | 3      |
| Approved General Education (H/S&BS – further studies) as found on the WSU Course Catalog  | 3      |

A total of 76 credit hours taken at Wichita State for the completion of the B.S.

degree in Industrial Engineering