Program Components

The program is specifically designed for IEF's partner institutions and will provide a vibrant academic and cultural experience for students. UT Austin faculty, staff & graduate students and community organizations will collaboratively contribute to the program. The program is structured with the following components:

- Scientific English Training
- Academic Seminars
- Site Visits
- Cultural enrichment activities

Scientific English Training
Two scientific English courses—one covering oral communication and the other written communication—will place particular focus on artificial intelligence and be held twice weekly over the course of the three-week program.

Oral Communication in Science
Class activities will focus on completing the following *four tasks* in English: 1) Understanding scientific lectures or presentations, 2) Giving an effective presentation in their field, 3) Participating appropriately in a moderated discussion on science-related topics, and 4) Communicating effectively in less formal situations with other professionals in their field.

In order to prepare the students for these tasks, *classroom instruction* will include training in note-taking, pronunciation, fluency, spoken accuracy, communicative competence, and cultural considerations in speaking and listening.

The *content* of the tasks and activities will be taken from current topics in STEM fields, with specific emphasis on *artificial intelligence*. Topics could include the following:

- Reasoning and problem solving
- Knowledge representation
- Planning
- Motion and manipulation
- Social Intelligence
- Learning
- Natural language processing
- Perception

Written Communication in Science
Class activities will focus on completing the following *four tasks* in English: 1) Understanding scientific research found in academic journals and textbooks, 2) Writing summaries and scientific reports, 3) Creating a personal statement about their background and research interests, and 4) Learning the basics of email communication with other professionals in their field.

In order to prepare the students for these tasks, *classroom instruction* will include training in note-taking from written texts; a review of sentence types, correct paragraph formation, and essay structure; presentations on the writing principles of cohesion, coherence, and unity; and a survey of rhetorical patterns in writing.

The *content* of the tasks and activities will be taken from current topics in STEM fields, with specific emphasis on *artificial intelligence*. The topics would be shared with the content of the oral communication course:

- Reasoning and problem solving
- Knowledge representation
- Planning
- Motion manipulation
- Social intelligence
- Learning
- Natural language processing
- Perception

Academic Seminars

Two academic seminars, each meeting for seven 2.5-hour sessions, will be provided on topics in artificial intelligence. Seminars will be led by UT faculty, staff & graduate students who have subject-expertise and proven teaching experience. Proposed topics could include the following:

- Automatic Programming
- Computer Vision
- Data Mining

- Learning Theory
- Machine Learning
- Robotics

Site Visits

To supplement their English coursework and academic seminars, students will participate in site visits to UT facilities and Austin-area businesses & organizations where they will have the opportunity to engage with local professionals & researchers in artificial intelligence. The site visits, three in total, will be carefully planned and arranged through faculty members and International Office staff. UT staff also will conduct a debriefing and reflection session after each visit to facilitate the learning and application process.

Cultural Enrichment Activities:

Enrichment activities are an essential way for participants to better understand American culture and the way in which Americans live their lives. Past program participants have remarked to International Office staff that they had come to the United States with many stereotypes about the U.S. people and culture and that after participating in our program, the majority of the stereotypes that they held had been shattered. There is no better way to provide cultural insight than to engage in local community activities and the members of the community themselves. Activities may include:

- Austin City Tour
- Bowling & Pizza
- Texas State Capitol
- Blanton Museum of Art
- Visit to the iconic UT Tower
- Sunset Bat Viewing Cruise on Lady Bird Lake
- International Student Night