College of Computer Science and Engineering, Yanbu
Department of Computer Science

Practical Training Guide

Bachelor's Degree Program

In Artificial Intelligence

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Contents

Topic	Page
Training Guide Instructions	3
Important Definitions	4
Introduction	5
Responsibilities	7
Policies	11
Registration for Training Sites	15
Training Field Course Description	17
Timeline for the practical training program	24

Training Guide Instructions

Article 1: The Field Training Unit is formed by a decision of the Dean of the College and a nomination from the Vice Dean for Academic Affairs and the Scientific Department at the beginning of each academic year, with a minimum of (3) members.

Article 2: The student is obligated to implement the instructions contained in this guide.

Article 3: The field training unit oversees the implementation of these instructions.

Article 4: Cases not subject to the provisions of these instructions shall be referred to the Department Council.

Article 5: These instructions supersede any previous instructions or decisions in this regard, effective from the date of their approval.

Article 6: These instructions may not be amended or revoked except by the decision of the Department Council.

Article 7: These instructions shall be effective upon approval by the Department Council.

Important Definitions

Field Training Unit: This unit consists of at least three faculty members from various academic departments within the college and is responsible for overseeing practical training. Its duties include receiving student registration applications for practical training courses, coordinating with different training providers, and fully supervising the implementation of practical training programs.

College Training Supervisor: Any faculty member on the college's field training committee who oversees all student training and field visits.

Practical Supervisor: The direct supervisor of the student's practical training, usually a member of the training team at the institution where the student is training.

Supervisor: The training supervisor in the department or the practical supervisor.

Training period: This refers to the practical training course for students in the Artificial Intelligence program.

Introduction

Vision

Providing high-quality practical training contributes to preparing highly competent graduates to serve the community in the best possible way.

Mission

Building an ambitious and promising generation of college graduates by building effective and distinguished relationships between college students and training entities in the field of training and education to achieve the highest degree of compatibility between the capabilities of college graduates and available jobs to develop and participate in development plans.

Objectives

Practical training for students aims to familiarize them with the realities of the professional environment and the diligence and discipline it demands. It also provides an opportunity for public and private sector institutions to assess students' potential and skills, as follows:

1. To help students acquire the knowledge necessary to work with various types of information technology, develop their scientific and practical skills, enhance their ability to analyze and understand the information they have learned during their studies, and improve their skills in meeting the diverse demands of the job market.

2. To optimize the use of resources, information technology, and artificial intelligence tools to improve the outcomes of their application.

3. To deepen students' understanding of the theoretical sciences they have studied at the college and help them grasp practical work in various fields of computer science, information technology, and artificial intelligence.

4. To participate in scientific research that serves and benefits the community.

5. To guide students in taking responsibility, adhering to deadlines, interacting respectfully with members of the community outside the university, and listening to their opinions.

6. To establish communication channels between the college administration and the job market to understand market demands, which helps in developing study plans.

7. To provide the labor market with the opportunity to evaluate students' performance during their training period and their potential to contribute to future industry, development, and service sector growth.

8. To equip students with the knowledge necessary to perform various tasks and to use information technology and artificial intelligence tools safely.

Overview of Practical Training

The Bachelor of Science in Artificial Intelligence program is designed to provide students with sufficient experience in computers and the field of artificial intelligence. The main objective of the practical training is to prepare students, develop their skills, and help them become independent in making career decisions, in addition to applying their knowledge and information in real-world situations. The curriculum for the Artificial Intelligence program at the College of Computer Science and Engineering in Yanbu, Taibah University, requires students to complete 150 hours of practical training.

Current Plan

Practical Training (AI 490): This consists of 150 hours of training, five days a week for six weeks. Registration for this training begins in the summer semester of each academic year after the student has completed 100 credit hours in their curriculum and passed the Machine Learning course AI 331.

Responsibilities

Field Training Unit Responsibilities

1. Coordinate with accredited institutions and entities to monitor the progress of student training and ensure the implementation of the training program.
2. Oversee the student trainee's follow-up of the training program, provide guidance, and assist with all necessary requirements to ensure they acquire the skills outlined in their training program.
3. Ensure that the college's training supervisor assists the student trainee in overcoming any difficulties and problems they encounter during the training period and provides appropriate solutions.

4. Follow up on the preparation of a report at the end of the training period, including a general evaluation of the supervised student trainee.
5. Determine the students' training time, their commitment to attendance and seriousness in training, the skills they acquired during the training period, and make necessary suggestions for developing the training mechanism according to the college's approved forms.
6. Ensure that the college's training supervisor conducts a field visit to inquire about the student trainee, confirm their presence during the summer semester, and document this in writing.
7. Work to prepare and hold a discussion at the college at the end of the practical training and announce the final training results.
8. Review complaints filed against the students and take the necessary action.
9. The committee has the right to cancel a student's practical training and require him or her to repeat it, provided there is justification for this.

Practical Supervisor Responsibilities

1. Supervise the students' activities to achieve the required tasks in accordance with the training period's objectives, devoting sufficient time to guidance and follow-up.
2. Demonstrate qualities that enhance their presence as a positive professional role model (e.g., appearance, behavior, work style, and professional achievements).
3. Assist students in developing their knowledge, skills, and experience through a structured, practice-based training program aligned with the curriculum.

4. Communicate with students regarding their appearance, behavior, and attitude, as well as the experience they can gain, and clarify their required working hours, as well as the general policies and procedures of the training site.
5. Provide students with access to all information resources available at the training site.
6. Regularly evaluate student performance through constructive feedback and provide specific recommendations for improvement.
7. Complete student assessments and grades on time and email them to the college's training supervisor on the last day of each training period.
8. To contact the college training supervisor regarding any major violations related to the student's activities, such as irregularity, unprofessional appearance or behavior, violation of training site policies, or inappropriate communication with healthcare practitioners, patients, and staff.

Student Responsibilities

1. The student must adhere to the training uniform and comply with the dress code of the training institution.
2. The students must attend training sessions on time, according to the schedule set by the college's training supervisor and conduct themselves appropriately.
3. The student must build a good relationship with their supervisors, as this relationship is an effective means of developing the learning process.
4. The student must maintain a high degree of respect when communicating with training supervisors. In the event of a difference of opinion regarding a case, the student is expected to seek to resolve these differences in an atmosphere of mutual

respect. Any criticism or correction from the supervisor should be viewed as a means of learning and development.

5. The student must be able to interact with diverse segments of society using written and verbal communication.
6. The students must maintain the privacy of the place by not revealing their identity regarding the work assigned to them except as permitted by the training institution's regulations.
7. The student must maintain a spirit of dedication and motivation during the training period and continue to seek guidance from specialists, which will help them achieve excellence and distinction.
8. The student is strictly prohibited from making any decisions that may affect their performance without direct consultation with the relevant supervisor.
9. The student is prohibited from taking any actions that violate the regulations of the training institution where they are training.
10. The student must refrain from any racist practices or behaviors that may negatively impact their decision-making.
11. The student is strictly prohibited from cheating or using the work of others and presenting it as purely personal. All forms of academic dishonesty are prohibited.
12. The student must abide by the law and adhere to the principles of the ethical framework, as well as all institutional policies, rules, and regulations.
13. During the training period, the student is prohibited from participating in any financial transactions (dealing with customers) within the training facility.
14. The student must follow the security and safety rules of the training facility.

Policies

Professional Competence

Students at the training site must conduct themselves professionally and adhere to professional ethics without any violations. They must also adhere to Islamic ethics, as well as the rules and regulations of the university, college, and training sites. In the event of any violations, the field supervisor must inform the college training supervisor. A decision will be made by the Head of Department or his/her designer regarding these violations after a report is submitted by the Field Training Committee.

Dress Code

Students must appear appropriately dressed and always adhere to the dress and behavior standards set by the college and training site. Based on the rules of Islamic law, proper professional appearance must include the following:

1. Students must always wear the official uniform while at the training site.
2. Students must follow any additional dress code rules as set by the training site.
3. Students must display their ID cards so that they are visible to all.
4. Students must be mindful that they represent the university and therefore must maintain discipline and good manners at training sites.

Absence Policies

1. Students must complete the required 150-hour training period within the allotted time.
2. Students must inform their supervisor of any absence or delay at least one day prior to the absence. The field supervisor must contact the college training supervisor to inform them.

A. Excused Absence

1. A student who wishes to request an excused absence must inform their supervisor and submit the request to the college training supervisor within one week before or after the absence, along with the appropriate documentation.
2. If a student is absent for five days or less, they must make up the missed hours within that training period by performing additional hours with the permission of the field supervisor, or they may be assigned to complete a project or task according to the directions and approval of the training supervisor.
3. If a student is absent for more than five days, provided that their absence does not exceed 25%, they will be required to make up for this period by adding it to the duration of the training period.
4. If a student's absence exceeds 25%, they will be referred to by the college's training committee for a decision.

B. Unexcused Absence

1. If a student is absent for five days or less during the training period, they must double the number of missed hours within that training period by completing additional hours with the permission of the practical supervisor (for example, if two days are missed, four days will be added).
2. If a student is absent for more than five days during the training period, they will be considered to have failed the training period, and the training period will be canceled after their absence is reviewed and approved by the college's training committee.

Tardiness Policies

- The student must be diligent in adhering to appointments and following the daily work schedule assigned by the training supervisor.

- If a student is late for a training period, they must make up for the missed hours.
- Practical supervisors must report any tardiness to the college training supervisor, as the following penalties will be applied:

Number of tardiness's	Penalty
First time	Warning letter from supervisor.
Second time	Will be considered a half-day absence (the student must make up for it with extra hours equivalent to half a day).
Third time	Will be considered a one-day absence (the student must make up for it with extra hours equivalent to one day).
Fourth time	Will be considered a two-day absence (the student must make up for it with extra hours equivalent to two days).
Fifth time	Will be considered an absence of more than three days without an excuse, and the matter will be referred to the college's training committee.
After that, the provisions of the second paragraph of the Unexcused Absence Policy apply.	

Vacation System

Students are obligated to follow the vacation calendar provided by the college's training supervisor. Students are not permitted to follow any other calendar.

Cancellation of the Training Period

Any student's training period will be canceled, and they will be required to repeat that type of training period, in the following cases, after reviewing the case with the college's training committee:

- If complaints are received regarding their professionalism or conduct, and if the committee receives another complaint, they will be considered to have failed the course.
- If they commit the following: Excused and Unexcused Absences and Tardiness
- If a student fails a training period for the third time, their case will be referred to the college council to consider dismissing their enrollment at the university and submit a recommendation to the Vice President for Academic Affairs.

Evaluation Methods

- Student evaluation is divided into 40% by the practical supervisor and 60% by the college's training committee, out of a total of 100 points.
- The training committee divides the 60 points into 10 points for discipline, 10 points for attendance, 10 points for discussion sessions, and 30 points for the final report submitted by the student to the college supervisor.
- The evaluation form is sent by the college training committee to the targeted training locations, where field training supervisors complete the form and return it to the college training supervisor after it is signed by the training officials at the training location and stamped with the official seal, considering the confidentiality of this form.
- The college training supervisors hold discussion sessions for students in small groups to ensure that they have acquired the necessary experience.
- The student passes the field training course when they achieve a minimum of 60%.

Registration for Training Sites

- It is the student's responsibility to register for training periods during the semester preceding the practical training period (second semester) to begin field training in the following semester (summer semester).

- The student must visit the college training supervisor at the beginning of the semester preceding the training period to receive a registration form and a list of approved training sites. The student must complete and submit the registration form to the college training supervisor before the end of the sixth week.

- A student wishing to receive training outside the Medina region must submit a letter of acceptance from the external site to the general training supervisor before the end of the eighth week of the semester. If the letter of acceptance is not submitted by the end of the eighth week, the general training supervisor will select local training sites based on availability.

- Students will be assigned to training sites by the college training supervisor based on their preferences, cumulative grade point average (GPA), and space availability at the selected training sites. The college's training committee will prepare a training list (including training locations and times) for students four weeks prior to the start of training. These schedules are final and cannot be changed without consulting the committee.

- After the training committee notifies the students of their training location and receives letters of approval from the training providers:

    - It is the student's responsibility to contact field supervisors at least two weeks prior to the start of the training period to obtain training hours.

- Online registration for the practical training course during the periods specified by the student under the supervision of the college's training committee.
- The students must meet all requirements and procedures for the training sites.

Field Training Course Description

Course Name: AI Practical Training (AI490)

Registration Date: Practical training is registered in the summer semester after the student has completed 100 study hours of his study plan and passed the Machine Learning AI331 course at a rate of 6 hours per day for five days a week, and this continues for a period of six weeks (150 hours).

Course Title: **AI Practical Training**
Course Code: AI**490**
Program: **Bachelor of Science in Artificial Intelligence**
Department: **Artificial Intelligence and Data Science**
College: College of Computer Science and Engineering
Institution: **Taibah University**
Field Experience Version Number: *V1*
Last Revision Date: **25 April 2024**

A. Field Experience Details:

1. Credit hours: (2 Credit Hour).		
2. Level/year at which Field Experience is offered: (Summer Level / 4th Year).		
3. Time allocated for Field Experience activities		
(6) Weeks	(5) Days	(150) Hours
4. Corequisite (or prerequisites if any) to join Field Experience		
Completing 100 credit hours in the program & AI331		
5. Mode of delivery		
☐In-person/onsite	☐hybrid (onsite/online)	☐Online

B. Field Experience Course Learning Outcomes (CLOs), Training Activities and Assessment Methods

Code	Learning Outcomes	Aligned PLO Code	Training Activities	Assessment Methods	Assessment Responsibility
1.0	**Knowledge and understanding**				
1.1	Recognize comprehensive overview of AI in both theory and practice with a focus on modern computational techniques for solving real-word issues.	**K1**	▪ The Teaching Staff (Academic Training advisor) and the training companies provide advice and guidance to the students about the work systems and procedures. ▪ Students are required to submit a report at the end of the training period is required and presents their achievements & tasks accomplished.	Evaluation by the training body, which measures the knowledge acquired during training, familiarity with the nature of the work assigned to it and its systems, the continuity of training, dealing with others, and observing the rules of the training authority's instructions The opinion of the supervisor who is followed up by the college and who makes frequent visits to the training authorities during the training period.	
1.2	AI Acquire problem-solving techniques that are applicable across a large of range information systems.				
2.0	**Skills**				

2.1	Analyze relevant AI-based algorithms to find optimum solutions for real world problems.	**S1**	▪ urged the trainee on how to be initiative by asking for intelligent solutions to the issues gained in the training environment. ▪ Help the trainee to think logically to resolve the issues through Artificial intelligence applications, and methods, algorithms. Discuss the issues in a realistic training environment.	Evaluation by the training body, which measures the skills acquired during training self- and reliance. The opinion of the supervisor who is followed up by the college and who makes frequent visits to the training authorities the during training period	
2.2	and Design develop intelligent programs for real cases in the field of AI.	**S2**			
2.3	the Assess accuracy of various AI algorithms and techniques when developing intelligent systems.	**S2**			
3.0	**Values, autonomy, and responsibility**				
3.1	Appraise teamwork utilizing effective group techniques to design, implement and demonstrat e practical tasks.	**V1, V3**	▪ The training supervisors provide advice and guidance to the trainee about his role as a member or head of a team in discussing the team's tasks and	Evaluation by the training body, which measures good dealing with others, of observance	

Code	Learning Outcomes	Aligned PLO Code	Training Activities	Assessment Methods	Assessment Responsibility

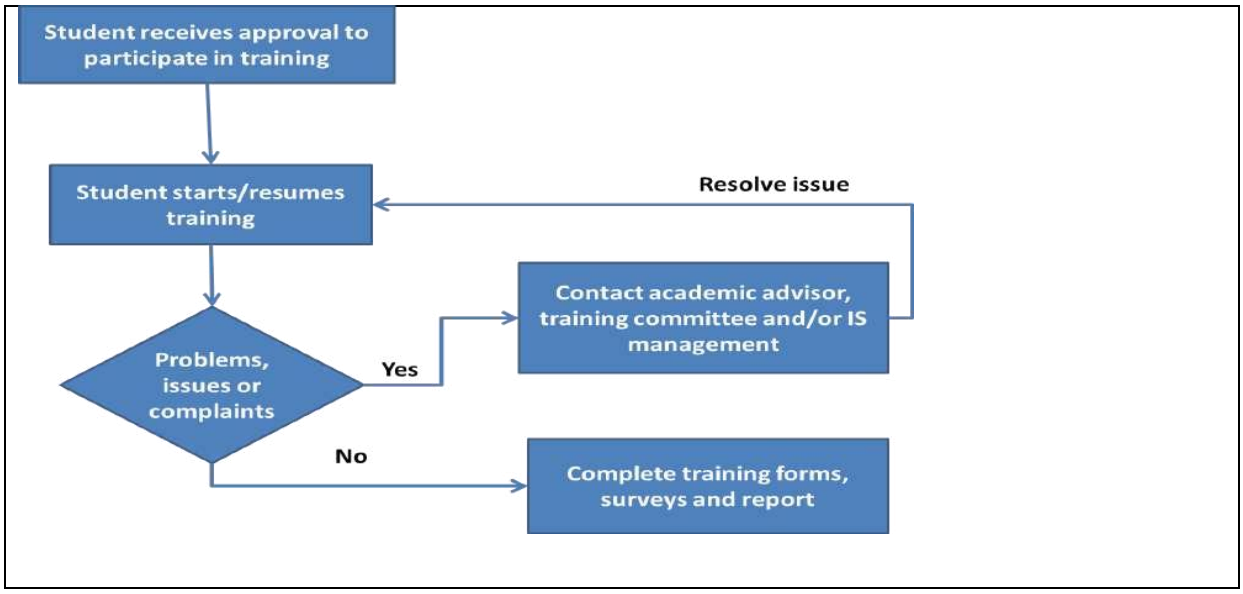
.2	Resolve professional and ethical issues related to his/her specialization with the employees in the training organizations.	**V1**	submitting proposals for their implementation. Assigning the trainee to an in-depth study of real-world issues directly related to his specialization and providing him with advice after giving him enough time to present his views on them. The tasks of the trainee include work that requires research in various sources of information.	the rules of the training body's instructions, acceptance of directions and instructions, the degree of work proficiency, and the ability to present ideas and clarity. The opinion of the supervisor who is followed up by the college and who makes frequent visits to the training authorities during the training period.	

*Assessment methods (i.e., practical test, field report, oral test, presentation, group project, essay, etc.).

C. Field Experience Administration

1. Field Experience Flowchart for Responsibility

Including units, departments, and committees responsible for field experience identifying by the interrelations.



2. Distribution of Responsibilities for Field Experience Activities

Activities	Department or College	Teaching Staff	Student	Training Organization	Field Supervisor
Selection of a field experience site	√		√		
Selection of supervisory staff	√			√	
Provision of the required equipment				√	√
Provision of learning resources	√			√ √	√
Ensuring the safety of the site		√			
Commuting to and from the field experience site			√		
Provision of support and guidance	√	√			√
Implementation of training activities (duties, reports, projects ...)			√		
Follow up on student training activities		√			√
Monitoring attendance and leave		√			√
Evaluating the quality of field experience	√	√	√		

3. Field Experience Location Requirements

Suggested Field Experience Locations	General Requirements*	Special Requirements**
Any governmental or private organization or Information technology systems and solutions	entity that provides, houses, or uses information technology at a medium or large scale	Dealing with computer information systems and applications

*E.g. provides information technology, equipment, laboratories, halls, housing, learning sources, clinics … etc.

** E.g. Criteria of the institution offering the training or those related to the specialization, such as safety standards, dealing with patients in medical specialties … etc.

4. Decision-Making Procedures for Identifying Appropriate Locations for Field Experience

A member of the training committee in the department makes an on-site visit to the organization location and reports back to the committee. The department signs a memorandum of understanding with organization to specify the roles of each party.

5. Safety and Risk Management

Potential Risks	Safety Actions	Risk Management Procedures
Workplace did not assign suitable field of study related tasks	Suitable selection should be done before the Co-Op starts	Co-Op academic advisor will contact the workplace supervisor and request to change the assigned tasks to Artificial Intelligence related tasks.
Students are not accepted for COOP training	The Department, College or the COOP office should help the students in selecting training organizations	Find COOP opportunities at Taibah University
Potential Risks	**Safety Actions**	**Risk Management Procedures**
NA	**NA**	**NA**

D. Training Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
1. Extent of achievement of course learning outcomes	Teaching Staff (Academic Training advisor) and Field supervisor	Direct / Indirect

2. Quality of learning resources	Teaching Staff (Academic Training advisor) and Students	Direct / Indirect
3. Improvement of teaching	Program Leaders	Direct / Indirect
4. Standards of student achievement	Teaching Staff (Academic Training advisor)	Direct

Evaluation areas (e.g., Effectiveness of Training and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Supervisory Staff, Program Leaders, Peer Reviewer, Others (specify) **Assessment Methods** (Direct, Indirect)

E. Specification Approval Data

Council /Committee	
Reference No.	
Date	

Timeline for the practical training program

Semester	Week	Task
The semester before the training semester	Third	1- Students will be invited to attend an introductory training session via text message and email. 2- The college's field training unit will compile a list of students and assign them to training positions based on their preferences and cumulative grade point averages.
	Fourth	The Cooperative Training Unit communicates with training providers to complete training procedures.
	Fifth to Tenth	1- The student confirms with a training provider. If the provider confirms, a letter addressed to the provider is provided, along with a preliminary acceptance letter (Form No. 2). 2- The training plan is aligned, and students are informed of the training requirements, including any specific academic requirements, by the training provider.
	Eleventh	The deadline for sending the final approval from the training entity to the field training unit, along with an approval form (Form No. 2).
	Twelfth	1- Delivery of practical training materials to accepted students at training centers. 2- Announcing the commencement of practical training to the supervising bodies for the students.

The semester in which the training begins	First	1. Students will begin their practical training at their respective training centers. 2. Names and training forms (Form No. 3) should be sent to the field Training Unit upon completion of the four days of this week.
	Third	The supervising authority visits the trainees at their training location and provides an initial assessment and notes the observations of the supervisors at the training facility (Form No. 8).
	(Sixth - Eighth)	1. Submit a mid-training report to the training provider to evaluate the progress of the training. 2. The academic supervisor conducts a field visit and holds a meeting with the training provider. 3. The students' performance of training tasks is monitored according to the plan. 4. The academic supervisor completes and monitors the training evaluation form, covering its various aspects. 5. The supervisor of the practical training provider completes Form (2) and returns it to the college's training supervisor after it has been signed by the training officials at the training location and stamped with the official seal. The confidentiality of this form must be maintained.