#### MONTANA STATE UNIVERSITY - BOZEMAN

### MECHANICAL AND INDUSTRIAL ENGINEERING DEPARTMENT

## **ENGINEERING INTERNSHIP PROGRAM**

Engineering Internship (EI) is a career-related, full-time, paid employment experience of 10-15 weeks duration.

## **Employer Responsibilities**

Internship employers will provide:

- position descriptions for each internship
- work related to the student's major field of study at a wage commensurate with the level and ability required
- supervision from a trained professional
- evaluation of the student's performance at the end of the work period

## **Student Responsibilities**

Internship students will:

- apply only to assignments for which they have a serious interest
- perform work of professional quality and effort
- follow company policies and procedures
- complete all reporting requirements for employer and EI program

## **Department Responsibilities**

The Department of M&IE and the engineering internship faculty coordinator will:

- review and approve internship work for academic credit
- register students in three credits of internship coursework
- monitor progress of students during work assignment
- evaluate final report and assign grade

The ME/MET Engineering Internship facilitates opportunities for qualified students to gain career-related employment experience while earning academic credit. Internship assignments will normally be made for 10-15 weeks during the summer term. Fall or spring term assignments are also possible. Internship students will work with professionals in their field and at a wage commensurate with the assignment level and technical ability required. Students may complete more than one engineering internship. They may earn a maximum of three professional elective credits.

Each company can use its own process to select students for engineering internships. Companies may set additional requirements as to academic level, grade point, etc. Selections may be made as follows:

- > on-campus interviews (arranged through Career Services)
- > telephone interviews
- > on-site interviews
- on the basis of submitted resumes

Offers of internship employment including term, salary, work assignment, etc. originate with the company.

## **Internship Qualification**

The M&IE Department will approve internships and work assignments based on the following criteria:

- company must employ engineers
- intern will work under the supervision of an engineer
- company and EI coordinator identify/develop suitable job descriptions
- work assignments must be of an engineering nature and consistent with education and experience of the intern
- > salary must be commensurate with work assignment

## **Formal Internship Requirements**

**Registration in Course:** Students with internship assignments must be enrolled in EMEC 498 or ETME 498. The course, credit, and grade appear on the student's transcript. Up to three passing credits may be used to fulfill a professional elective requirement in the curriculum.

**Cost:** With registration in the three-credit course, associated tuition costs apply. That expense, plus others which are typically incurred include:

Tuition Travel Rent Damage Deposit

Written Reports: Interns and employers will provide written reports to the EI coordinator.

Reports from the student include:

- internship contract, including tasks/responsibilities assigned
- **2** bi-weekly progress reports
- **3** final report

Reporting from the employer involves an intern evaluation. The employer will evaluate the intern's job performance and provide feedback to the intern and the EI coordinator. Employer reports should include employee strengths, weaknesses, and suggestions for improvement.

### MONTANA STATE UNIVERSITY

### DEPARTMENT OF MECHANICAL & INDUSTRIAL ENGINEERING

## INTERN CONTRACT

Course		_ Credit Hours	<b>.</b>	Date
	EC 498 or ETME 498			
Academic Y	<sup>r</sup> ear	Fall	Spring	Summer
	Student Nam	e		GID#
	E-Mail Ac	ldress		Bozeman Phone
	E-Mail Address Durin	g Internship		Phone During Internship
The student	will intern with		Organizat	ion
			8	
	Add	ress		
	C	ity/State		Phone
Type of orga	anization			
Student will	be supervised by (Plea	se print.)		
		•		
_				
Intern will b	e assigned to		epartment or Di	vision
Student Res	<u>ponsibilities</u>	20	partificate of D1	violon
	dent will complete the fordinator.	ollowing assignme	nts to be evalua	ted by the Internship Faculty
A.	Bi-Weekly Progress Reports	(1-2 pages; wha	at was done and	plans for next two weeks)
B.	Final Report	(complete repoi		accomplishments:

Super	visor Responsibilities							
Super	visor Responsibilities							
Super	visor Responsibilities							
Super	visor Responsibilities							
Super	visor Responsibilities							
Super	visor Responsibilities							
Super	visor Responsibilities							
Super	visor Responsibilities							
-	•							
1.	The sponsoring organization will provide the intern	with supervision, training, and resources						
1.		with supervision, training, and resources						
1.	necessary to perform assigned tasks.	with supervision, training, and resources						
	necessary to perform assigned tasks.							
2	The sponsoring organization will immediately notifi	y the Internship Coordinator should early						
2.	The sponsoring organization will immediately notify	y the Internship Coordinator should early						
	termination of the internship become necessary.							
	•							
3.	The sponsoring organization will provide an overall written evaluation of the intern upon							
	completion of the internship.	1						
	completion of the internamp.							
	Student	Date						
	Student	Date						
	Industry Supervisor	Date						
	Industry Supervisor	Date						
	Industry Supervisor	Date						
	Industry Supervisor	Date						
	Industry Supervisor  r MET Internship Faculty Coordinator	Date Date						

### To Intern Supervisors:

In the Intern Contract, Student Responsibilities - Item #3, we need descriptive language from you in order to evaluate the responsibilities and tasks that our engineering intern will be assigned. The student will be enrolled in the equivalent of three credits of senior-level coursework for the work they will accomplish in industry. The internship should draw on the skills the intern has gained from completed coursework, and it should provide an appropriate technical challenge.

From the details you provide, we will determine:

- Is there problem development?
- Is there information gathering and assessment?
- Is there development of alternatives?
- Will the intern make engineering decisions, based on engineering knowledge?
- Is there potential for the intern to gain skills, confidence, and attitude for future employment as an engineer?
- Will the intern be regularly exposed to engineers doing work?

Please keep these considerations in mind as you complete #3 in the Intern Contract. Thank you for providing this valuable experience for one of our engineering students.

## Mechanical and Industrial Engineering Department ME and MET Internship Program

#### Bi-Weekly Progress Report Format

Please use an appropriate technical memo format to complete the bi-weekly progress report. The report can be completed in MS Word or pdf format. The report should be submitted to the Internship Coordinator via email with the report attached. At a minimum, the bi-weekly progress report should address the following:

- 1. A discussion of the specific objectives/milestones you were assigned during the past two weeks.
- 2. A discussion of your progress in meeting the assigned objectives. Include a discussion of the actual progress compared to the planned timeline or schedule.
- 3. A description of how unforeseen or unplanned incidents, assignments, experiences or specific incidents which took place during the reporting period resulted in additional learning.
- 4. Provide a list of objectives for the next two week reporting period. Include a list of milestones with dates.
- 5. Please list and describe any questions or problem areas you would like some help with from your Professor or Internship Faculty Coordinator.

NOTE: Learning objectives are not to be considered rigid. They should be, instead, flexible guideposts to direct your learning efforts. Learning should be thought of as any skill, knowledge, understanding, or attitude you have improved upon or achieved for the first time. The learning can be related to the technical, human relations, management, or marketing areas. Use your Final Report Format as a possible guideline for some of your weekly objectives. It is suggested that you should keep a daily journal to be used in completing these bi-weekly reports. Also, these bi-weekly reports should be completed in a manner which will facilitate writing the final report.

### FORMAT FOR INTERNSHIP FINAL REPORT

### **ORDER OF APPEARANCE:**

- 1. Title Page
- **2. Abstract** On title page or separate page (written last). The abstract contains a brief statement of the purpose of the report and summary of conclusions (about one-half page).
- 3. Table of Contents
- **4. Introduction** State the purpose of the report. Give a general, brief description of work including company, location, supervisor, etc.
- **5. Detailed Description of Work** Where appropriate, include examples, drawings, etc. If these are lengthy, put them in an appendix and refer to it. It is important to emphasize openended problem assignments and solutions to same. Open-ended means that there may be (and probably are) more than one valid solution. This is necessary for earning ABET design credits. This section will contain much of the same information you submitted in your biweeklyreports.
- **6. Evaluation of the Internship Experience** Discuss the various aspects of the internship including the value (positive or negative) relative to your academic pursuits and professional development. Include any other technical or non-technical items learned but not mentioned above.
- 7. Suggestions for Improving the Internship Experience
- 8. Appendices

#### **Notes:**

- 1. The report must be typed with 1 1/2 to 2 spaces between lines and reasonable margins.
- 2. Your final report will be evaluated and considered as part of the overall grade for your internship. The report should be sufficiently detailed that a general reader could understand and evaluate your accomplishments. Supplemental materials such as drawings, computations, product information, etc. should be included if appropriate.
- 3. The final report can be submitted immediately at the conclusion of your work or at your leisure but no later than six weeks from ending your internship. If the report is submitted after the grading deadline for the semester of your internship, an incomplete grade (I) will be recorded and then changed once the final report is received.
- 4. The report will be completed in MS Word or PDF format and submitted to the internship coordinator as an email attachment.

## Montana State University - Bozeman

# Mechanical and Industrial Engineering Department

## **Engineering Intern Performance Review**

Intern Name:	
Company:	
Review Date:	
Reviewer:	

### **Goals of the Performance Review**

Evaluate the intern's work performance

Inform the intern of strengths and weaknesses

Improve job performance by providing feedback and suggestions

## Part 1 - Overall Job Performance

		Ranking							
	1 - Well below expectations								
		2 - Slightly below expectations							
			3 - Consistent with expectations						
			4 - Above expectations 5 - Far exceeds expectations						
				N/A - no opportunity to observe					
	<u> </u>								
Category							Feedback		
Technical Ability	1	2	3	4	5	N/A			
Planning	1	2	3	4	5	N/A			
Interpersonal Skills	1	2	3	4	5	N/A			
Decision Making	1	2	3	4	5	N/A			
Creative Ability	1	2	3	4	5	N/A			
Productivity	1	2	3	4	5	N/A			
Initiative	1	2	3	4	5	N/A			
Communications	1	2	3	4	5	N/A			
Teamwork	1	2	3	4	5	N/A			
Safety	1	2	3	4	5	N/A			
Overall Evaluation	1	2	3	4	5	N/A			

## Part 2 - Performance on Specific Job Assignments

Assigned Task	Performance Feedback				
Part 3 - Supervisor  Positive Feedback:	's Comments	Concerns:			
Positive Feedback.		Concerns.			
Specific suggestions for performance improvement and personal growth:					

This performance review becomes part of the intern's file. Please return this form (or a copy) to:

Engineering Internship Coordinator
Department of Mechanical and Industrial Engineering
Montana State University
Bozeman, MT 59717-3800
Email:

ME <u>jeffrey.kinkaid@montana.edu</u>
MET <u>jeffrey.kinkaid@montana.edu</u>