

Nom EES : OPTIC AND MECHNICS INSTITUT  
Département : Optic

**SYLLABUS DE LA MATIERE**  
**(à publier dans le site Web de l'institution)**

<b>ENSEIGNANT DU COURS MAGISTRAL</b>	<b>FACI ABDELAZIZ</b>
	Réception des étudiants par semaine
Email	faciaziz@yahoo.com
Tél de bureau	Jour :
Tél secrétariat	Jour :
Autre	Bâtiment : S5 Bureau : S5

# TRAVAUX DIRIGES

## (Réception des étudiants par semaine)

# TRAVAUX PRATIQUES

## (Réception des étudiants par semaine)

DESCRIPTIF DU COURS	
Objectif	this module provides an introduction to the fundamental ideas and techniques of statistical mo
Type Unité Enseignement	Fondamental
Contenu succinct	
Crédits de la matière	06
Coefficient de la matière	4
Pondération Participation	
Pondération Assiduité	
Calcul Moyenne C.C	
Compétences visées	

EVALUATION DES CONTROLES CONTINUS DE CONNAISSANCES							
PREMIER CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date Consult. copie)	Critères évaluation (2)
COURSE	C	30MIN		Non	/20	05/02/2023	
DEUXIEME CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date consultation copies)	Critères évaluation (2)
COURSE	C	30MIN		NON	/20	05/02/2023	

(1) Type : E=écrit, EI=exposé individuel, EC=exposé en classe, EX=expérimentation, QCM

(2) Critères évaluation :A=Analyse, S=synthèse, AR=argumentation, D=démarche, R=résultats

EQUIPEMENTS ET MATERIELS UTILISES	
Adresses Plateformes	<a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a>
Noms Applications (Web, réseau local)	WEB
Polycopiés	PDF
Matériels de laboratoires	none
Matériels de protection	none
Matériels de sorties sur le terrain	none

<b>LES ATTENTES</b>	
Attendues des étudiants (Participation-implication)	basic knowledge of probability theory and notions of parametric statistics
Attentes de l'enseignant	Mastery of probability calculation and know-how of statistical control in the field of industrial metrology

<b>BIBLIOGRAPHIE</b>	
Livres et ressources numériques	Livres et polycopiés, sites internet, etc
Articles	Applied Statistics and Probability for Engineers Douglas C. Montgomery, George C. Runger John Wiley and Sons, Inc, 2003
Polycopiés	fichiers pdf du cours
Sites Web	all web sites in relations with the subject of this course

Cachet humide du département

NameSEE : FERHAT ABBAS UNIVERSITY SETIF  
OPTICS and PRECISION MECHANICS INSTITUTE

Département : OPTICS

## **SYLLABUS OF THE MODULE**

**(to be published on the institution's website)**

## Function of Standardization

<b>MASTER COURSE TEACHER</b>	<b>ROUMILI Fouad</b>				
	Reception of students per week				
Email	f.roumili@univ-setif.dz	Day :	Wednesday	Hour	09:30
Office phone		Day :		Hour	
Secretariat phone	036 74 92 04	Day :		Hour	
Other		Building :	B2	Office :	S5

# TUTORIALS

(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Seance 1		Seance 2		Seance 3	
		day	hour	day	hour	day	hour
ROUMILI Fouad	S5	Wed	11:00				

## PRACTICAL WORK

(Reception of students per week)

COURSE DESCRIPTION							
Objective	Understand the national organization of standardization activity as well as the technical regulations in force in the companies.						
Type Teaching Unit	Fundamental						
Short content	How standardization works; Standards organizations; Procedures for developing standards and technical regulations.						
Module Credits	5						
module coefficient	3						
Weighting Participation	7						
Weighting Attendance	3						
C.C Mean Calculation	Questioning*0.5 + participation*0.35 + attendance*0.15						
Required Skills	Research and acquisition of national standards. Mastery of standards development procedures. Mastery of standards-conformity assessment relationships.						

ASSESSMENT OF KNOWLEDGE CONTINUOUS CONTROLS							
FIRST KNOWLEDGE CONTROL							
day	Seance	Duration	Type (1)	Authorized Doc (Yes, No)	Scale	Exchange after evaluation (date copy Consult.)	Evaluation Criteria (2)
01/02/2023	1	1h30	QCM	No		09/02/2023	
SECOND KNOWLEDGE CONTROL							
day	Seance	Duration	Type (1)	Authorized Doc (Yes, No)	Scale	Exchange after evaluation (date copy Consult.)	Evaluation Criteria (2)
						Cliquez ici pour entrer une date.	

(1) Type : E=writing, EI=individual presentation, EC=presentation in class, EX=experimentation, MCQ

(2) Evaluation Criteria :A=Analysis, S=Synthesis ,AR=Argumentation, D=Demarche, R=Results

EQUIPMENT AND MATERIALS USED	
Addresses Platforms	<a href="https://iomp.univ-setif.dz/">https://iomp.univ-setif.dz/</a> <a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a>
Applications Names (Web, local network)	Moodle
Handout	
Laboratory materials	
Protective materials	
Field trip materials	

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<b>EXPECTATIONS</b>	
Expected from students (Participation-implication)	Acquisition of standards Reading and understanding standards Understanding of technical regulations
Teacher expectations	Differentiation between different types of standards Attitude to have towards standards. Raising awareness on technical barriers to trade

<b>BIBLIOGRAPHY</b>	
Books and digital resources	Loi 04-04 du 23 juin 2004 relative à la normalisation Décret 464-05 relatif à la normalisation Décret 465-06 relatif à l'évaluation de la conformité
Papers	A. Chevalier, Normalisation en construction mécanique, Techniques de l'ingénieur. Les organismes nationaux de normalisation dans les pays en développement, ISO
Handouts	
Web sites	<a href="http://www.ianor.dz">http://www.ianor.dz</a>

**Wet stamp of the department**

EES name: FERHAT ABBAS UNIVERSITY SETIF 1  
 Department : Institute of Optics and Mechanics

### MATERIAL SYLLABUS

(to be published on the institution's website)

### Basic metrology

MASTER COURSE TEACHER		Teacher's first and last name			
		Reception of students per week			
E-mail	n_khanafi@yahoo.fr	Day :	Sunday	hour	8h
office phone		Day :		hour	
Tel secretariat	036 74 92 04	Day :		hour	
Other		Building :	AT	Desk :	S5

### TUTORIALS

(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Session 1		Session 2		Session 3	
		day	hour	day	Hour	day	hour
Benghalem Nafissa	S5	Sunday	9:30				

### PRACTICAL WORK

(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Session 1		Session 2		Session 3	
		day	hour	day	hour	day	hour
Mihoubi Sabira	Metro Lab	lund	8h				
isaad dahia	Metro Lab	lund	8h				
Gahmousse Abdelazi	Metro Lab	lund	8h				
Soualem Azzedine	Metro Lab	lund	8h				

<b>COURSE DESCRIPTION</b>	
Objective	Review and master the basic notions of calculation errors, coordinate measurement techniques
Type Unit Teaching	UEF
Short content	
Subject Credits	6
material coefficient	4
Weighting Participation	7
Weighting Attendance	3
DC Average Calculation	
Targeted skills	The objective is to master the basic notions of Calculation of errors and uncertainties Coordinate measurement methods

<b>ASSESSMENT OF CONTINUOUS KNOWLEDGE CHECKS</b>							
<b>FIRST KNOWLEDGE CHECK</b>							
Day	Session	Duration	Kind (1)	Doc authorized (Yes, No)	Scale	Exchange after evaluation (date Consult. copy)	Evaluation criteria (2)
SATURDAY	1	1h30		No		01/28/2023	AS
<b>SECOND KNOWLEDGE CHECK</b>							
Day	Session	Duration	Kind (1)	Doc authorized (Yes, No)	Scale	Exchange after evaluation (date consultation copies)	Evaluation criteria (2)
						Click here to enter a date.	

(1) Type: E=written, EI=individual presentation, EC=class presentation, EX=experimentation, MCQ

(2) Evaluation criteria: A=Analysis, S=synthesis, AR=argumentation, D=approach, R=results

<b>EQUIPMENT AND MATERIALS USED</b>	
Addresses Platforms	<a href="https://iomp.univ-setif.dz/">https://iomp.univ-setif.dz/</a> <a href="http://cte.univ-setif.dz/moodle/course/category.php">http://cte.univ-setif.dz/moodle/course/category.php</a>
Application names (Web, local network)	local network
Handouts	
Laboratory materials	Profile projector, optical splitter, large workshop microscope, horizont universal meter
Protective materials	

Field trip equipment	

<b>EXPECTATIONS</b>	
Expected of students (Participation-involvement)	the student is able to solve any type of metrological problems masters a large number of methods and principles
Teacher expectations	any metrological problem must be solved with the presentation of quality results writes reports according to standards

<b>BIBLIOGRAPHY</b>	
Books and digital resources	Khennafi Nafissa, Dimensional metrology and measurement techniques EU Nov 2015
Items	
Handouts	Bouamama Larbi, Dimensional Metrology OPU 2007
Web sites	

**Wet stamp of the**  
**department**

Nom EES : INSTITUTE OF OPTICS AND PRECISION MECHANICS  
Département : OPTICS

## **SYLLABUS DE LA MATIERE**

**(à publier dans le site Web de l'institution)**

# INSTRUMENTATION ELECTRONIQUE

<b>ENSEIGNANT DU COURS MAGISTRAL</b>	<b>ARABI Abderrazak</b>				
	Réception des étudiants par semaine				
Email	a.arabi@univ-setif.dz	Jour :	Sunday	heure	9H30
Tél de bureau		Jour :		heure	
Tél secrétariat		Jour :		heure	
Autre	0659515925	Bâtiment :		Bureau :	S2

# TRAVAUX DIRIGÉS

## (Réception des étudiants par semaine)

NOMS ET PRENOMS DES ENSEIGNANTS	Bureau/salle réception	Séance 1		Séance 2		Séance 3	
		jour	heure	jour	Heure	jour	heure
ARABI Abderrazak	S2	SUN	11H00				

## TRAVAUX PRATIQUES

## (Réception des étudiants par semaine)

DESCRIPTIF DU COURS							
Objectif	manipulate and choose the appropriate instrument for the different applications they will be faced						
Type Unité Enseignement	Fondamental						
Contenu succinct	fondamental electronics						
Crédits de la matière	3						
Coefficient de la matière	3						
Pondération Participation	7						
Pondération Assiduité	3						
Calcul Moyenne C.C	assiduity+participation+interrogation						
Compétences visées	Comprehension of the operating principle of the different instruments and their applications						

EVALUATION DES CONTROLES CONTINUS DE CONNAISSANCES							
PREMIER CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date Consult. copie)	Critères évaluation (2)
SUND	T	30MIN	E	No	/10	11/06/2023	R
DEUXIEME CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date consultation copies)	Critères évaluation (2)
SUND	T	30MIN	E	No	/10	11/06/2023	R

(1) Type : E=écrit, EI=exposé individuel, EC=exposé en classe, EX=expérimentation, QCM

(2) Critères évaluation :A=Analyse, S=synthèse, AR=argumentation, D=démarche, R=résultats

EQUIPEMENTS ET MATERIELS UTILISES	
Adresses Plateformes	<a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a>
Noms Applications (Web, réseau local)	WEB
Polycopiés	PDF
Matériels de laboratoires	electrical laboratory materials
Matériels de protection	none
Matériels de sorties sur le terrain	none

<b>LES ATTENTES</b>	
Attendues des étudiants (Participation-implication)	Knowing the different measuring instruments in electronics and their applications
Attentes de l'enseignant	Improved mastery and understanding of the operating principal of electronic instruments Dedicated to measuring different quantities.

<b>BIBLIOGRAPHIE</b>	
Livres et ressources numériques	Barchiesi D., Mesure, Mesure physique et instrumentation, Analyse statistique et spectrale des mesures, captation et traitement des signaux, Ellipses, Ed. Paris, 2003, 178 pages.
Articles	
Polycopiés	pdf files of the course
Sites Web	All websites related to the course topic

**Cachet humide du département**

EES name:INSTITUTE OF OPTICS AND PRECISION MECHANICS  
Department :optical

### **MATERIAL SYLLABUS**

(to be published on the institution's website)

### **ELECTRICAL MEASUREMENTS**

<b>MASTER COURSE TEACHER</b>		<b>Mezache zinelabiddin</b>			
		Reception of students per week			
E-mail	z.mezache@univ-setif.dz	Day :	Sunday	hour	8:00 a.m.
office phone		Day :	Wednesday	hour	8:00 a.m.
Tel secretariat		Day :	Tuesday	hour	10:00 a.m.
Other	050523463	Building :	BLOCK A	Desk :	3

### **TUTORIALS**

**(Reception of students per week)**

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Session 1		Session 2		Session 3	
		day	hour	day	Hour	day	hour
MEZACHE Z	Room 2	Wednesday	8:00 a.m.	Wednesday	9:00 a.m.		

### **PRACTICAL WORK**

**(Reception of students per week)**

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Session 1		Session 2		Session 3	
		day	hour	day	hour	day	hour
MEZACHE Z	Lab. Electrical	Tuesday	11:00	Tuesday	1:00 p.m.	Tuesday	2:00 p.m.
HAMOUDA A;	Electrical Lab	Tuesday	11:00	Tuesday	1:00 p.m.	Tuesday	2:00 p.m.

COURSE DESCRIPTION	
Objective	To fully understand acquisition systems
Type Unit Teaching	Fundamental
Short content	
Subject Credits	06
material coefficient	04
Weighting Participation	
Weighting Attendance	
DC Average Calculation	
Targeted skills	Understanding of acquisition systems used in metrology

ASSESSMENT OF CONTINUOUS KNOWLEDGE CHECKS							
FIRST KNOWLEDGE CHECK							
Day	Session	Duration	Kind (1)	Doc authorized (Yes, No)	Scale	Exchange after evaluation (date Consult. copy)	Evaluation criteria (2)
FROM THE COURT	VS	30MIN	Ec	No	/20	06/11/2023	DD
SECOND KNOWLEDGE CHECK							
Day	Session	Duration	Kind (1)	Doc authorized (Yes, No)	Scale	Exchange after evaluation (date consultation copies)	Evaluation criteria (2)
FROM THE COURT	VS	30MIN	CE	No	/20	06/11/2023	D

(1) Type: E=written, EI=individual presentation, EC=class presentation, EX=experimentation, MCQ

(2) Evaluation criteria: A=Analysis, S=synthesis, AR=argumentation, D=approach, R=results

EQUIPMENT AND MATERIALS USED	
Addresses Platforms	<a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a>
Application names (Web, local network)	WEB
Handouts	PDF

Laboratory materials	electrical laboratory equipment
Protective materials	none
Field trip equipment	none

<b>EXPECTATIONS</b>	
Expected of students (Participation-involvement)	Know the different elements used in acquisition systems
Teacher expectations	better mastery and understanding acquisition systems

<b>BIBLIOGRAPHY</b>	
Books and digital resources	Measurement - Data Acquisition Systems  Sampling, conversion, applications Erik Etienne - Technosup Collection 2010
Items	
Handouts	course pdf files
Web sites	all related websites classes

**Wet stamp of the department**

NameSEE : FERHAT ABBAS UNIVERSITY SETIF  
OPTICS and PRECISION MECHANICS INSTITUTE

Department : OPTICS

**SYLLABUS OF THE MODULE**  
(to be published on the institution's website)

**Mechanical Measurements**

<b>MASTER COURSE TEACHER</b>		<b>ROUMILI Fouad</b>			
		Reception of students per week			
Email	f.roumili@univ-setif.dz	Day :	Wednesday	Hour	11:00
Office phone		Day :		Hour	
Secretariat phone	036 74 92 04	Day :		Hour	
Other		Building :	B2	Office :	S2

**TUTORIALS**  
(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Seance 1		Seance 2		Seance 3	
		day	hour	day	hour	day	hour
ROUMILI Fouad	S2	Wed	14:00				

**PRACTICAL WORK**  
(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Seance 1		Seance 2		Seance 3	
		day	hour	day	hour	day	hour
ROUMILI Fouad	Metrology Lab.	Tues	14:00				
BOUALI Fakhreddine	Metrology Lab.	Tues	14:00				

COURSE DESCRIPTION							
Objective	Acquisition of measurement techniques for a few mechanical quantities						
Type Teaching Unit	Fundamental						
Short content	Friction coefficient measurement; Spring rate measurement; Moment of inertia measurement; Stress measurement.						
Module Credits	6						
module coefficient	4						
Weighting Participation	7						
Weighting Attendance	3						
C.C Mean Calculation	Questioning*0.5 + participation*0.35 + attendance*0.15						
Required Skills	Techniques for measuring mechanical quantities Case study and determination of measurement uncertainties						

ASSESSMENT OF KNOWLEDGE CONTINUOUS CONTROLS							
FIRST KNOWLEDGE CONTROL							
day	Seance	Duration	Type (1)	Authorized Doc (Yes, No)	Scale	Exchange after evaluation (date copy Consult.)	Evaluation Criteria (2)
		1h30	E	No		04/06/2023	
SECOND KNOWLEDGE CONTROL							
day	Seance	Duration	Type (1)	Authorized Doc (Yes, No)	Scale	Exchange after evaluation (date copy Consult.)	Evaluation Criteria (2)
						Cliquez ici pour entrer une date.	

- (1) Type : E=writing, EI=individual presentation, EC=presentation in class, EX=experimentation, MCQ  
(2) Evaluation Criteria :A=Analysis, S=Synthesis ,AR=Argumentation, D=Demarche, R=Results

EQUIPMENT AND MATERIALS USED	
Addresses Platforms	<a href="https://iomp.univ-setif.dz/">https://iomp.univ-setif.dz/</a> <a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a>
Applications Names (Web, local network)	Moodle
Handout	
Laboratory materials	Sliding calipers ; Rule ; Precision scale ; masses; Device for springs study.
Protective materials	
Field trip materials	

<b>EXPECTATIONS</b>	
Expected from students (Participation-implication)	Experimental measurement techniques Compliance with measurement procedures Calculation of experimental measurement uncertainties
Teacher expectations	Mastery of experimental procedures Acquisition of good practices in metrology Report the measurement result with uncertainty

<b>BIBLIOGRAPHY</b>	
Books and digital resources	R. Figliola Theory and design for mechanical measurements N. Axén, Friction and wear measurement techniques H. A. Gandhi, Mechanical measurement and metrology
Papers	
Handouts	
Web sites	

**Wet stamp of the department**

Nom EES : FERHAT ABBAS SETIF1 UNIVERSITY

Department : INSTITUTE OF OPTICS AND PRECISION MECHANICS

### SYLLABUS DE LA MATIERE

(à publier dans le site Web de l'institution)

### Optical measurements

ENSEIGNANT DU COURS MAGISTRAL		Dr. Sara MAROUF			
		Réception des étudiants par semaine			
Email	maroufsara@univ-setif.dz	Jour :	Monday	heure	11h00-12h30
Tél de bureau	0793003527	Jour :		heure	
Tél secrétariat		Jour :		heure	
Autre		Bâtiment :		Bureau :	

### TRAVAUX DIRIGÉS

(Réception des étudiants par semaine)

NOMS ET PRENOMS DES ENSEIGNANTS	Bureau/salle réception	Séance 1		Séance 2		Séance 3	
		jour	heure	jour	Heure	jour	heure
Dr. Sara MAROUF	S2	Sunday	8h-9h30				

### TRAVAUX PRATIQUES

(Réception des étudiants par semaine)

NOMS ET PRENOMS DES ENSEIGNANTS	Bureau/salle réception	Séance 1		Séance 2		Séance 3	
		jour	heure	jour	heure	jour	heure
Dr. Sara MAROUF	Optics lab	Thursday	8h-10h				


<b>DESCRIPTIF DU COURS</b>	
Objectif	This subject allows students to know the main optical measuring instruments, to understand the fundamental principles behind each type of measurement of the different optical quantities.
Type Unité Enseignement	UEF 1.1
Contenu succinct	<ul style="list-style-type: none"> <li>•Power measurements</li> <li>•Optical spectrum analysis</li> <li>•Lambdameters</li> <li>•Polarization state measurement</li> <li>•Reflectometry</li> <li>•Reflective index measurement</li> <li>•Laser heterodyne and homodyne</li> </ul>
Crédits de la matière	6
Coefficient de la matière	4
Pondération Participation	7
Pondération Assiduité	3
Calcul Moyenne C.C	3+7+10/20
Compétences visées	Know the different types of optical measurement

<b>EVALUATION DES CONTROLES CONTINUS DE CONNAISSANCES</b>							
<b>PREMIER CONTROLE DE CONNAISSANCES</b>							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date Consult. copie)	Critères évaluation (2)
10/04	8h-	30 min	E	no		01/01/2023	A

	9h30				/10		
<b>DEUXIEME CONTROLE DE CONNAISSANCES</b>							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date consultation copies)	Critères évaluation (2)
8/05	8h-9h30	30min	E	no	/10	Cliquez ici pour entrer une date.	A

(1) Type : E=écrit, EI=exposé individuel, EC=exposé en classe, EX=expérimentation, QCM

(2) Critères évaluation :A=Analyse, S=synthèse, AR=argumentation, D=démarche, R=résultats

<b>EQUIPEMENTS ET MATERIELS UTILISES</b>	
Adresses Plateformes	<a href="https://iomp-courses.univ-setif.dz/my/">Institut d'Optique et Mécanique de Précision (univ-setif.dz)</a> <a href="https://iomp-courses.univ-setif.dz/my/">https://iomp-courses.univ-setif.dz/my/</a>
Noms Applications (Web, réseau local)	
Polycopiés	pdf
Matériels de laboratoires	photometer, spectroscope
Matériels de protection	
Matériels de sorties sur le terrain	

<b>LES ATTENTES</b>	
Attendues des étudiants (Participation-implication)	To know the main optical measuring instruments and to understand the fundamental principles behind each type of measurement of the different optical quantities.
Attentes de l'enseignant	To teach students the science of measuring optically.

<b>BIBLIOGRAPHIE</b>	
Livres et ressources numériques	<ul style="list-style-type: none"> <li>-“Les réflectomètres optiques principe et critères de choix” N. Ruchaud, Contrôles Essais Mesures n° 7, avril 2004, pp 31-34.</li> <li>-Norme NF EN 61315 “Étalonnage des radiomètres pour sources fibrées”, novembre 1997.</li> <li>-Norme CEI 61744 “Étalonnage des ensembles d'essai de la dispersion chromatique des fibres optiques”, février 2001.</li> <li>-Collet, C.V. and A.D. Hope, <i>Engineering Measurements</i>, The English Language Book Society, Pitman Publishing Limited, reprint 1980,</li> </ul>

	New Delhi.
Articles	
Polycopiés	
Sites Web	

**Cachet humide du département**

Nom EES : INSTITUTE OF OPTICS AND PRECISION MECHANICS  
Département : OPTIC

## **SYLLABUS DE LA MATIERE**

**(à publier dans le site Web de l'institution)**

## Métrologie optique

ENSEIGNANT DU COURS MAGISTRAL	Nom et prénom de l'enseignant				
	Réception des étudiants par semaine				
Email	dihiaissaad@yahoo.fr	Jour :	Monday	heure	14:00h
Tél de bureau	/	Jour :	Tuesday	heure	08:00h
Tél secrétariat	/	Jour :	Wednesday	heure	08:00h
Autre	0774406074	Bâtiment :	IOMP	Bureau :	Room2

# TRAVAUX DIRIGÉS

### (Réception des étudiants par semaine)

# TRAVAUX PRATIQUES

## (Réception des étudiants par semaine)

DESCRIPTIF DU COURS	
Objectif	Master the methods of measurement and control by light Apply optical methods in metrology.
Type Unité Enseignement	Methodological UE
Contenu succinct	<ol style="list-style-type: none"> <li>1. Principles of optics and fiber optics</li> <li>2. Optical components and optical systems</li> <li>3. Laser beam geometry and its applications</li> <li>4. Alignment metrology</li> <li>5. Photogrammetry</li> <li>6. Laser velocity</li> <li>7. Holographic interferometry</li> <li>8. Moire technique</li> <li>9. Speckle metrology</li> </ol>
Crédits de la matière	4
Coefficient de la matière	3
Pondération Participation	3
Pondération Assiduité	3
Calcul Moyenne C.C	40% continuous control and 60% Exam
Compétences visées	Carry out checks by optical methods Differentiate between various optical phenomena used in different measurement techniques.

EVALUATION DES CONTROLES CONTINUS DE CONNAISSANCES							
PREMIER CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date Consult. copie)	Critères évaluation (2)
15 May		30 min	E	NO	10		R
DEUXIEME CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date consultation copies)	Critères évaluation (2)
03 April		15 min	EI	YES	4		

(1) Type : E=écrit, EI=exposé individuel, EC=exposé en classe, EX=expérimentation, QCM

(2) Critères évaluation :A=Analyse, S=synthèse, AR=argumentation, D=démarche, R=résultats

EQUIPEMENTS ET MATERIELS UTILISES	
Adresses Plateformes	<a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a> Moodle
Noms Applications (Web, réseau local)	/ /
Polycopiés	Optical metrology practical work Fiber Optic Practical Work

	(Characterization and transmission)
Matériels de laboratoires	Optical fiber Laser diode and spectroscope
Matériels de protection	/ /
Matériels de sorties sur le terrain	/ /

<b>LES ATTENTES</b>	
Attendues des étudiants (Participation-implication)	TD exercise resolution Expose the research topics Be responsible for the material
Attentes de l'enseignant	Improve practical and theoretical skills Answer students' questions Verify student understanding

<b>BIBLIOGRAPHIE</b>	
Livres et ressources numériques	De Groot, Peter J. "Une revue de sujets sélectionnés en métrologie optique interférométrique. les progrès en physique 82.5 (2019): 056101.
Articles	
Polycopiés	course PDF
Sites Web	<a href="https://www.edmundoptics.fr/knowledge-center/application-notes/lasers/metrology-for-laser-optic">https://www.edmundoptics.fr/knowledge-center/ application-notes/lasers/metrology-for-laser-optic</a> <a href="https://www.techniques-ingieur.fr/base-documentation">https://www.techniques-ingieur.fr/base-documentation</a>

Cachet humide du département

Nom EES : FERHAT ABBAS SETIF 1 UNIVERSITY  
Département : Optic

## **SYLLABUS DE LA MATIERE**

**(à publier dans le site Web de l'institution)**

# Instrumentation under labVIEW

<b>ENSEIGNANT DU COURS MAGISTRAL</b>	<b>Bakhouche belkacem</b>
	Réception des étudiants par semaine
Email	belkacem.bakhouche@univ-s
Tél de bureau	Jour : Tuesday heure 9h-11h
Tél secrétariat	Jour : Wednesda heure 9h-11
Autre	Bâtiment : Bureau : Bloc B

## **TRAVAUX DIRIGÉS**

## (Réception des étudiants par semaine)

## TRAVAUX PRATIQUES

## (Réception des étudiants par semaine)

DESCRIPTIF DU COURS							
Objectif	The Course is designed to provide an introduction Complete to labVIEW from the basics of prog G						
Type Unité Enseignement	Methodological						
Contenu succinct	Introduction to LabVIEW Advanced programming						
Crédits de la matière	5						
Coefficient de la matière	3						
Pondération Participation	30%						
Pondération Assiduité	10%						
Calcul Moyenne C.C	40%						
Compétences visées	Understanding of the development environment LabVIEW, create projects and VIs, and Acquire data in real time						

EVALUATION DES CONTROLES CONTINUS DE CONNAISSANCES							
PREMIER CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date Consult. copie)	Critères évaluation (2)
Monday	1	1h30	EX	Non	10	Cliquez ici pour entrer une date.	D
DEUXIEME CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date consultation copies)	Critères évaluation (2)
Monday	1	1h	EX	Non	10	Cliquez ici pour entrer une date.	D

(1) Type : E=écrit, EI=exposé individuel, EC=exposé en classe, EX=expérimentation, QCM

(2) Critères évaluation :A=Analyse, S=synthèse, AR=argumentation, D=démarche, R=résultats

EQUIPEMENTS ET MATERIELS UTILISES	
Adresses Plateformes	<a href="https://iomp-courses.univ-setif.dz/course/view.php?id=122">https://iomp-courses.univ-setif.dz/course/view.php?id=122</a>
Noms Applications (Web, réseau local)	Logiciel LabVIEW
Polycopiés	
Matériels de laboratoires	
Matériels de protection	
Matériels de sorties sur le terrain	

<b>LES ATTENTES</b>	
Attendues des étudiants (Participation-implication)	Curiosity and commitment to learning the Programming problem solving ability Collaborative ability to work in a team
Attentes de l'enseignant	prior knowledge of programming and electronics Development of transferable skills Practical learning

<b>BIBLIOGRAPHIE</b>	
Livres et ressources numériques	"LabVIEW Graphical Programming Cookbook" by Yik Yan "LabVIEW for Engineers" by Ronald Larsen (2nd Edition) "LabVIEW Programming, Data Acquisition and Analysis"
Articles	"Getting Started with LabVIEW" by National Instruments "LabVIEW Basics" by Dr. Richard Jennings ( <a href="https://users.ece.cmu.edu/~koopman/labs/labview.pdf">https://users.ece.cmu.edu/~koopman/labs/labview.pdf</a> )
Polycopiés	
Sites Web	<a href="https://www.ni.com/en-us/shop/labview.html">https://www.ni.com/en-us/shop/labview.html</a> <a href="https://forums.ni.com/t5/LabVIEW/bd-p/170">https://forums.ni.com/t5/LabVIEW/bd-p/170</a> <a href="http://www.labviewmakerhub.com/">http://www.labviewmakerhub.com/</a>

**Cachet humide du département**

EES name:FERHAT ABBAS UNIVERSITY SETIF1  
 Department :institute of optics and mechanics

### **MATERIAL SYLLABUS**

(to be published on the institution's website)

### **Mass metrology**

<b>MASTER COURSE TEACHER</b>		<b>Teacher's first and last name</b>			
		<b>Reception of students per week</b>			
E-mail	n_khanafi@yahoo.fr	Day :	Tuesday	hour	14h
office phone		Day :		hour	
Tel secretariat	036 74 92 04	Day :		hour	
Other		Building :	B	Desk :	S2

### **TUTORIALS**

(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Session 1		Session 2		Session 3	
		day	hour	day	Hour	day	hour
Benghalem Nafissa	S2	Tuesday	3:30				

### **PRACTICAL WORK**

(Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Session 1		Session 2		Session 3	
		day	hour	day	hour	day	hour
Keraghel Fatiha	Metro Lab	Tuesday	9 h				
Rahmani mohamed	Metro Lab	Tuesday	9 h				

COURSE DESCRIPTION	
Objective	Notions on weighing, constitution of an instrument Weighing, calibration of a weighing instrument
Type Unit Teaching	UEF
Short content	Verification and calibration of weighing instruments
Subject Credits	5
material coefficient	4
Weighting Participation	7
Weighting Attendance	3
DC Average Calculation	
Targeted skills	

ASSESSMENT OF CONTINUOUS KNOWLEDGE CHECKS							
FIRST KNOWLEDGE CHECK							
Day	Session	Duration	Kind (1)	Doc authorized (Yes, No)	Scale	Exchange after evaluation (date Consult. copy)	Evaluation criteria (2)
Monday	1	1h30	E	No		02/09/2023	AS
SECOND KNOWLEDGE CHECK							
Day	Session	Duration	Kind (1)	Doc authorized (Yes, No)	Scale	Exchange after evaluation (date consultation copies)	Evaluation criteria (2)
						Click here to enter a date.	

(1) Type: E=written, EI=individual presentation, EC=class presentation, EX=experimentation,

MCQ

(2) Evaluation criteria: A=Analysis, S=synthesis, AR=argumentation, D=approach, R=results

EQUIPMENT AND MATERIALS USED	
Addresses Platforms	<a href="https://iomp.univ-setif.dz/">https://iomp.univ-setif.dz/</a> <a href="http://cte.univ-setif.dz/moodle/course/category.php">http://cte.univ-setif.dz/moodle/course/category.php</a>
Application names (Web, local network)	Local network
Handouts	Courses in measurement systems and metrology, Richard Dybiac, 2012
Laboratory materials	Automatic scale of standard weights a Roberval balance of marked masses and ordin

Protective materials	
Field trip equipment	

<b>EXPECTATIONS</b>	
Expected of students (Participation-involvement)	know the basics of weighing mastery of the verification of balances and standard masses
Teacher expectations	Calibration of weighing instruments masses

<b>BIBLIOGRAPHY</b>	
Books and digital resources	
Items	OIML R76: Weighing instrument with non-automatic function ISO 45501: Metrological aspects of pes instruments
Handouts	Course in measurement systems and metrology Richard Dybiac, 2012 Khennafi Nafissa metrology of masses and weighing, November 2015
Web sites	

Wet stamp of the department

NameSEE : FERHAT ABBAS UNIVERSITY SETIF  
OPTICS and PRECISION MECHANICS INSTITUTE

Département : OPTICS

**SYLLABUS OF THE MODULE**  
**(to be published on the institution's website)**

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<b>MASTER COURSE TEACHER</b>	<b>ROUMILI Fouad</b>				
	Reception of students per week				
Email	f.roumili@univ-setif.dz	Day :	Monday	Hour	08:00
Office phone		Day :		Hour	
Secretariat phone	036 74 92 04	Day :		Hour	
Other		Building :	B2	Office :	S2

# TUTORIALS

## (Reception of students per week)

NAMES AND FIRST NAMES OF TEACHERS	Office/reception room	Seance 1		Seance 2		Seance 3	
		day	hour	day	hour	day	hour
ROUMILI Fouad	S2	Mon	09:30				

## PRACTICAL WORK

(Reception of students per week)

COURSE DESCRIPTION							
Objective	Understand and master the requirements of the ISO 14001 standard in the vision of the implementation of an environmental management system.						
Type Teaching Unit	Methodological						
Short content	Initial environmental analysis; environmental policy; Planning ; The implementation of the EMS, Monitoring of the EMS, Audit.						
Module Credits	4						
module coefficient	3						
Weighting Participation	7						
Weighting Attendance	3						
C.C Mean Calculation	Questioning*0.5 + participation*0.35 + attendance*0.15						
Required Skills	Performing an initial environmental analysis. Drafting of an environmental policy. Establishment of a work plan for the implementation of an EMS. Monitoring and Control of the EMS. EMS documentation management.						

ASSESSMENT OF KNOWLEDGE CONTINUOUS CONTROLS							
FIRST KNOWLEDGE CONTROL							
day	Seance	Duration	Type (1)	Authorized Doc (Yes, No)	Scale	Exchange after evaluation (date copy Consult.)	Evaluation Criteria (2)
26/01/2023	2	1h30	QCM	No		09/02/2023	A S
SECOND KNOWLEDGE CONTROL							
day	Seance	Duration	Type (1)	Authorized Doc (Yes, No)	Scale	Exchange after evaluation (date copy Consult.)	Evaluation Criteria (2)
						Cliquez ici pour entrer une date.	

(1) Type : E=writing, EI=individual presentation, EC=presentation in class, EX=experimentation, MCQ

(2) Evaluation Criteria :A=Analysis, S=Synthesis ,AR=Argumentation, D=Demarche, R=Results

EQUIPMENT AND MATERIALS USED	
Addresses Platforms	<a href="https://iomp.univ-setif.dz/">https://iomp.univ-setif.dz/</a> <a href="https://iomp-courses.univ-setif.dz/">https://iomp-courses.univ-setif.dz/</a>
Applications Names (Web, local network)	Moodle
Handout	
Laboratory materials	
Protective materials	
Field trip materials	

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<b>EXPECTATIONS</b>	
Expected from students (Participation-implication)	Mastery of the basic principles of management Acquisition of methodological analysis tools Drafting of procedure for the implementation of the EMS
Teacher expectations	Being able to integrate into an EMS Ability to work in a team Know the requirements of environmental management

<b>BIBLIOGRAPHY</b>	
Books and digital resources	E. Bauraing, Mise en place d'un SME environnemental Norme ISO 14001
Papers	S. Fernandez, Normalisation dans le domaine de l'environnement
Handouts	
Web sites	<a href="http://www.inem.org/inem">http://www.inem.org/inem</a> <a href="http://helios.emse.fr/~brodhag/projelev/menugra.ht">http://helios.emse.fr/~brodhag/projelev/menugra.ht</a> <a href="http://www.oree.com/">http://www.oree.com/</a>

**Wet stamp of the department**

Nom EES : OPTIC AND MECHNICS INSTITUT  
Département : Optic

**SYLLABUS DE LA MATIERE**  
**(à publier dans le site Web de l'institution)**

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<b>ENSEIGNANT DU COURS MAGISTRAL</b>	<b>GHABROUR SAHRAOUI</b>
	Réception des étudiants par semaine
Email	sahraoui.ghabrour@univ-setif.d
Tél de bureau	Jour :
Tél secrétariat	Jour :
Autre	Bâtiment : Bureau :

# TRAVAUX DIRIGÉS

## (Réception des étudiants par semaine)

# TRAVAUX PRATIQUES

## (Réception des étudiants par semaine)

DESCRIPTIF DU COURS							
Objectif	Mastery and understanding of the value Of standards in the energy sector						
Type Unité Enseignement	Fundamentale						
Contenu succinct							
Crédits de la matière	4						
Coefficient de la matière	3						
Pondération Participation							
Pondération Assiduité							
Calcul Moyenne C.C							
Compétences visées	Understanding the value of standards in the design and installation of energy meters						

EVALUATION DES CONTROLES CONTINUS DE CONNAISSANCES							
PREMIER CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date Consult. copie)	Critères évaluation (2)
COURS	C	30MIN	EC	NON	/20	01/01/2023	D
DEUXIEME CONTROLE DE CONNAISSANCES							
Jour	Séance	Durée	Type (1)	Doc autorisé (Oui, Non)	Barème	Echange après évaluation (date consultation copies)	Critères évaluation (2)
						18/01/2023	

(1) Type : E=écrit, EI=exposé individuel, EC=exposé en classe, EX=expérimentation, QCM

(2) Critères évaluation :A=Analyse, S=synthèse, AR=argumentation, D=démarche, R=résultats

EQUIPEMENTS ET MATERIELS UTILISES	
Adresses Plateformes	<a href="https://iomp-courses.univ-setif.dz/moodle">https://iomp-courses.univ-setif.dz/ moodle</a>
Noms Applications (Web, réseau local)	moodle web
Polycopiés	format pdf
Matériels de laboratoires	electrical laboratory equipment
Matériels de protection	none
Matériels de sorties sur le terrain	none

<b>LES ATTENTES</b>	
Attendues des étudiants (Participation-implication)	have an idea and their practical application lectrical energy the field of metering of electrical energy
Attentes de l'enseignant	mastering the usefulness of standards and their application in the field of energy

<b>BIBLIOGRAPHIE</b>	
Livres et ressources numériques	IEC 62052 and its annex
Articles	NFC 15100
Polycopiés	format pdf of course
Sites Web	all web site in relation of the subjects of this course

**Cachet humide du département**

EES name : INSTITUTE OF OPTICS AND PRECISION MECHANICS  
Departement : OPTIC

## **MATTER SYLLABUS**

**(to be published on the institution's website)**

# Microscopic measurement and control technique

LECTURER		Proffesor's first and last name			
		Student reception per week			
Email	azilkenza@gmail.com	day :	Sunday	Hour	14:00h
N ° OFFICE	/	day :	monday	Hour	08:00h
Tel secretariat	/	day :	tuesday	Hour	08:00h
OTHER	0668710789	Location :	IOMP	office :	room2

## DIRECTED WORKS

### (Student reception per week)

# PRACTICAL WORK

### (Student reception per week)

DESCRIPTION OF COURSE	
Objectives	Introduce the student to microscopic analysis and measurement techniques
Type Unit Education	Fondamental UE
Succinct content	<ul style="list-style-type: none"> <li>• <i>Light- matter and interactions</i></li> <li>• <i>Image formation</i></li> <li>• <i>Microscopies in bright and dark field</i></li> <li>• <i>Polarization microscopy</i></li> <li>• <i>Phase and interferential microscopies</i></li> <li>• <i>Fluorescence microscopy</i></li> <li>• <i>Confocal microscopy</i></li> <li>• <i>Image sensors (CCD /CMOS)</i></li> <li>• <i>Other techniques</i></li> </ul>
Credits of the subject	5
Material coefficient	4
Equity Weighting	3
Weighting Attendance	3
Calculation Average C.C.	40% Continuous Control and 60% Exam
Intended competencies	Perform measurements by optical microscopes Differentiate between optical microscopes Utility of each microscope

EVALUATION OF CONTINUOUS KNOWLEDGE CHECKS							
INITIAL KNOWLEDGE CHECK							
day	Session	Duration	Type (1)	Doc authorized (yes, No)	Scale	Exchange after evaluation (date Consult. copy)	Evaluation criteria (2)
20 DEC		30 min	W	No	10	Cliquez ici pour entrer une date.	D R
SECOND KNOWLEDGE CHECK							
day	Session	Duration	Type (1)	Doc authorized (yes, No)	Scale	Exchange after evaluation (date Consult. copy)	Evaluation criteria (2)
20 nov		15 Min	IP	yes	4	Cliquez ici pour entrer une date.	EC

(1) (1) Type: W=written, IP=individual presentation, CP=class presentation, EX=experimentation, MCQ

(2) Evaluation criteria: A=Analysis, S=synthesis, AR=argumentation, A=approach, R=results

EQUIPMENT AND MATERIALS USED	
Platform Addresses	
Application Names (Web, LAN)	/ /
Handout	handout of Dr : GUESSOUM ASSIA  Practical work on polarising microscope (Characterization of the different minerals)
laboratory Materials	rock blades, berifringent medium polarizing microscope
protection Materials	/ /
Field Exit Equipment	/ /

Expectations	
Expected of students (Participation-involvement)	TD exercise resolution Expose the research topics Be responsible for the material
Professor expectations	Improve practical and theoretical skills Answer students' questions Verify student understanding

BIBLIOGRAPHY	
Books and numerical ressources	Mertz, J. (2019). Introduction to optical microsc
Articles	Richard J. Evans, in Encyclopedia of Physical Scie  Timberley M. Roane, Ian L. Pepper, in Environmenta
Handouts	course PDF
Web sites	<a href="https://www.microscopyu.com/">https://www.microscopyu.com/</a>

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**Department wet stamp**