Tunisian Republic
Private Higher School of Engineers of Gafsa
Private Higher Education Institution,
State-approved under N° 05-2013

Course Title:	**Preparing for the LPI 102**
Course Code:	CSE342
Program:	Master Degree In Computer Engineering
Department:	Computer Engineering
Course coordinator:	Mrs. Saida AKERMI
Institution:	Private Higher School of Engineers of Gafsa (ESIP)

A. Course Identification

1. Credit hours: 1.5(00-0-1.5)

2. Course type
a. University ☐ College ☐ Department ■ Others ☐
b. Required ■ Elective ☐

3. Level/year at which this course is offered: 2.1/3

4. Pre-requisites for this course : digital circuits (CSE122), Data structure (CSE131), Operating system (OS), LPI 101(CSE231)

1. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Self-study	Total workload
1	**Traditional classroom**	…..		
2	**Blended**	22.5		
3	**E-learning**	......	14.5	37
4	**Distance learning**	......		
5	**Other ()**	......		

2. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	
2	**Laboratory/Studio**	22.5
3	**Tutorial**	
4	**Others**(specify)	-
	Total	22.5

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B. Course Objectives and Learning Outcomes

Course Description LPI 102 is one of two parts of the Linux Professional Institute (LPI) Level 1 certification. This certification is internationally recognized and is designed to validate the skills of IT professionals in administering Linux systems.

Course Main Objective
Students will be able to :
    Understand how Linux System works
    Master Basic Network Services
    Linux Web server Configuration
    Install and implement many server or role
    Learn how to protect services
    Be able to put on production windows server on network

1. Course Learning Outcomes

	CLOs	AlignedPLOs
1	**Knowledge and Understanding**	
1.1	✓ Understand how Linux System works	PLO.K1
1.2	✓ Linux Web server Configuration	
1.3	✓ Linux Web server Configuration	
2	**Skills**	
3.1	✓ Install and implement many server or role	PLO.S3
3.2	✓ Learn how to protect services	
2.2	✓ Be able to put on production windows server on network	PLO.S6

C. Course Content

No	List of Topics	Contact Hours
1	Classroom Lecture and Guided Work	10
2	**1. Install Windows Server 2016, DHCP, DNS…** Objectives: -install and implement many server or role to be able to put them on production in network enterprise. **2.Install and configure Active Directory** Objectives: -To be able to manage every machine in network enterprise	12.5
	Total	22.5

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D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
PLO.K1	✔ Understand how Linux System works ✔ Master Basic Network Services ✔ Linux Web server Configuration	- Lecturing - Class discussion - Labdemonstration - Class discussion	Assignments, Quizzes , Exams,
2.0	**Skills**		
PLOS3	✔ Install and implement many server or role ✔ Learn how to protect services	- Lecturing - Labdemonstration - Class discussion	Assignments, report, Quizzes , Exams,,
PLO.S6	✔ Be able to put on production windows server on network	- Lecturing - Labdemonstration - Class discussion	Assignments, Report, Quizzes , Exams

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Practical Work (written or oral)	Weekly	00%
2	Quizzes, Homework assignments	Random	00%
3	First midterm	08	00%
4	Final Exam	16	100%

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :
1- Office hours
2- Blackboard interface

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F. Learning Resources and Facilities

1. Learning Resources

RequiredTextbooks	1. Sébastien ROHAUT, « Préparation à la certification LPIC-1 », Examens LPI 101 et LPI 102, 5ème édition 2017 ,838 pages. 2. Kay A. ROBBINS, S. ROBBINS. UNIX Systems Programming: Communication, Concurrency and Threads, 2003, Prentice-Hall. 3. W. RICHARD STEVENS, Stephen A. RAGO. Advanced Programming in the UNIX Environment, 2nd Edition, 2005, Addison-Wesley. 4. A. SILBERSCHATZ, P. GALVIN, G. GAGNE. Operating System Concepts. International Student Version, 8th Edition, Wiley, February 2009. 5. A. SILBERSCHATZ, P. GALVIN, G. GAGNE. Operating System Concepts with Java, 8th Edition, Wiley, February 2010. 6. Andrew S. TANENBAUM. Systèmes d'exploitation, 3ème édition, Octobre 2008, Edition Pearson Education. 7. U. RAMACHANDRAN, William D. LEAHY Jr. Computer Systems: An Integrated Approach to Architecture and Operating Systems, First Edition, July 2010, Addison Wesley. 8. A. Tanenbaum. Modern Operating Systems, 1992, Computer Science 9. Benoît Semelin, « Astrophysique et instrumentations associées ». Cours UNIX,2006
Essential References Materials	1.
Electronic Materials	• Online resources and LPI 102 practice exams • Digital lecture materials and interactive tutorials
Other Learning Materials	2. https://www.eyrolles.com/Informatique/Theme/239/theories-des-systemes-d-exploitation/ 3. https://www.bestcours.com/systeme-exploitation/ 4. http://www.advancedlinuxprogramming.com/alp-folder **https://www.lpi.org/our-certifications/lpic-1-overview**

2. Facilities Required

Item	Resources
Accommodation	**Classroom board** **Computer lab with the necessary software** **Internet access**
Technology Resources	**Data projector**

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G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment.	Students, course coordinator, Alumni, Employers	Direct/Indirect
Extent of achievement of course learning outcomes.	Faculty, Program Leaders, quality department	Direct
Quality of Learning resources	Faculty, Program Leaders,	Direct, Indirect
Teaching and learning quality and effectiveness.	Students, Faculty Program Leaders,	Direct, Indirect

H. Specification Approval Data

Council / Committee	Computer Engineering Council
Date	11/09/2023