

MS in Cybersecurity and Digital Forensics (CSDF)

Program Learning Outcomes Assessment Report

B. Program Assessment (2023-2024)

1. Program Learning Outcomes Assessment and analysis according to PLOs assessment plan *

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Targeted Performance (%)	Assessment Results
Knowledge and Understanding				
K1	An ability to understand a problem and identify the computing requirements appropriate to its solution	Direct: Class Test, Mid Exam, Final Exam, Final Project Indirect: Student Course Survey	70%	93%
Skills				
S1	Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions	Direct: Class Test, Mid Exam, Final Exam, Final Project Indirect: Student Course Survey	70%	90%
S2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline	Direct: Lab Based Assignments, Mini Project & Final Project Indirect: Student Course Survey	70%	89%
S3	Communicate effectively in a variety of professional contexts	Direct: Oral or Written Communication, Seminar, Final Project Indirect: Student Course Survey	70%	91%
S4	Identify and analyze		70%	91%

	user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems. [IT]	Direct: Case Study Implementation/ Laboratory/Mini project Indirect: Student Course Survey		
S5	An ability to apply knowledge of computing and mathematics appropriate to the discipline	Direct: Class Test, Mid Exam, Final Exam, Final Project Indirect: Student Course Survey	70%	96%
Values, autonomy, and responsibility				
V1	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline	Direct: Group Assignments, Mini Project, Final Project Indirect: Student Course Survey	70%	93%
V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles	Direct: Class Test, Mid Exam, Final Exam, Final Project Indirect: Student Course Survey	70%	95%

*Attach a separate report on the program learning outcomes assessment results for male and female sections and for each branch (if any).

Strengths:

All student out comes (PLOs) attain the exceeding expectation (above than 89%)

Aspects that need improvement with priorities: Increase the Target performance (85%)

B. Program Assessment (2022-2023)

1. Program Learning Outcomes Assessment and analysis according to PLOs assessment plan *

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Targeted Performance (%)	Assessment Results
Knowledge and Understanding				
K1	An ability to understand a problem and identify the computing requirements appropriate to its solution	Class Test, Mid Exam, Final Exam	70	85
Skills				
S1	Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions	Class Test, Mid Exam, Final Exam	70	85
S2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline	Lab Based Assignments, Mini Project	70	86
S3	Communicate effectively in a variety of professional contexts	Group Assignments, Mini Project	70	95

S4	Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems. [IT]	Case Study Implementation/ Laboratory /Mini project	70	87
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S5	An ability to apply knowledge of computing and mathematics appropriate to the discipline	Class Test, Mid Exam, Final Exam	70	95
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Values, autonomy, and responsibility

V1	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline	Oral or Written Communication, Seminar	70	91
V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles	Class Test, Mid Exam, Final Exam	70	87

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Strengths:

All student out comes (PLOs) attain the exceeding expectation (above than 80%)

B. Program Assessment (2021-2022)

2. Program Learning Outcomes Assessment and analysis according to PLOs assessment plan *

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Targeted Performance (%)	Assessment Results
Knowledge and Understanding				
K1	An ability to understand a problem and identify the computing requirements appropriate to its solution	Direct: Class Test, Mid Exam, Final Exam Indirect: Student Course Survey	70%	88%
Skills				
S1	Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions	Direct: Class Test, Mid Exam, Final Exam Indirect: Student Course Survey	70%	80%
S2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline	Direct: Lab Based Assignments, Mini Project Indirect: Student Course Survey	70%	81%
S3	Communicate effectively in a variety of professional contexts	Direct: Oral or Written Communication, Seminar Indirect: Student Course Survey	70%	94%
S4	Identify and analyze user needs and to take them into account in the selection,	Direct: Case Study Implementation/ Laboratory/Mini project Indirect: Student Course	70%	85%

	creation, integration, evaluation, and administration of computing-based systems. [IT]	Survey		
S5	An ability to apply knowledge of computing and mathematics appropriate to the discipline	Direct: Class Test, Mid Exam, Final Exam Indirect: Student Course Survey	70%	96%
Values, autonomy, and responsibility				
V1	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline	Direct: Group Assignments, Mini Project Indirect: Student Course Survey	70%	88%
V2	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles	Direct: Class Test, Mid Exam, Final Exam Indirect: Student Course Survey	70%	87%

*Attach a separate report on the program learning outcomes assessment results for male and female sections and for each branch (if any).

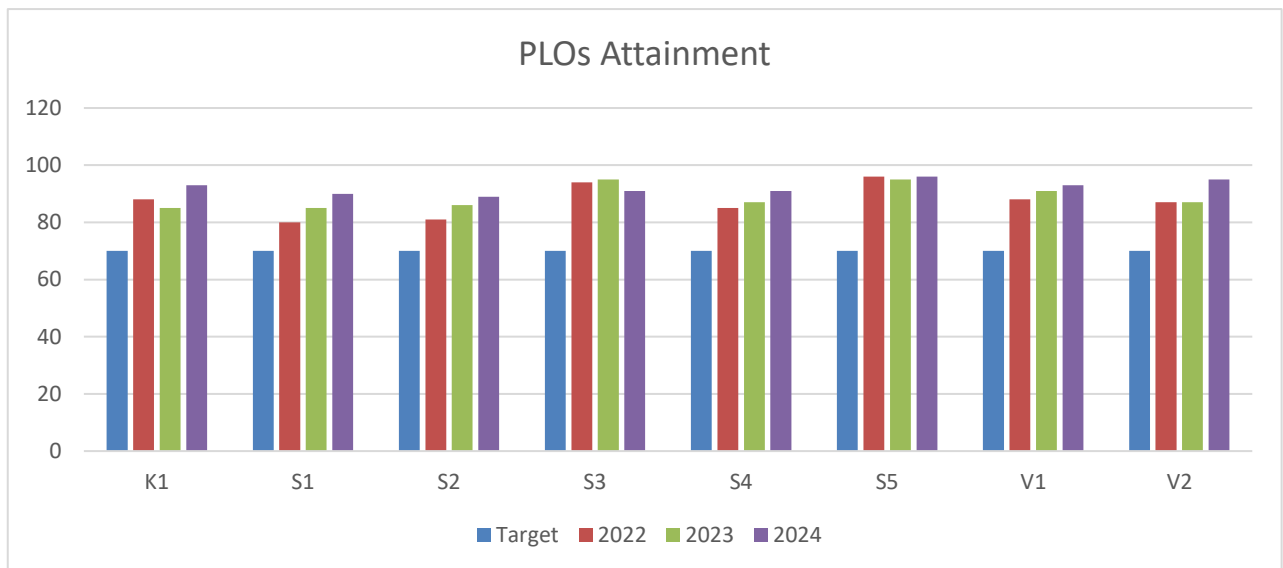
Strengths:

All student out comes (PLOs) attain the exceeding expectation (above than 80%)

Aspects that need improvement with priorities: Increase the Target performance (80%)

Comparison (2024,2023 & 2022)

PLO	Targeted Performance (%)	Assessment Results 2022 Achieved %	Assessment Results 2023 Achieved %	Assessment Results 2024 Achieved %
K1	70	88	85	93
S1	70	80	85	90
S2	70	81	86	89
S3	70	94	95	91
S4	70	85	87	91
S5	70	96	95	96
V1	70	88	91	93
V2	70	87	87	95



Attainment of MSCSDF PEOs for 2021-22 & 2022-23 by Direct Assessment

2023-24 by Direct Assessment

PEO1		
PLO Code	Target	Results
K1	70%	93%
S1	70%	91%
S2	70%	89%
S4	70%	91%
S5	70%	96%
PEO1	70%	92%

PEO2		
PLO Code	Target	Results
S2	70%	89%
S4	70%	91%
V1	70%	93%
PEO2	70%	91%

PEO3		
PLO Code	Target	Results
S3	70%	91%
S4	70%	91%
V1	70%	93%
V2	70%	95%
PEO3	70%	93%

Comments: PEO1, PEO2 and PEO3 are exceeding expectations (EE) level (85%) in 2023-24.

Improvement Plan:

Retain the plan and target level may be increased to 85%.

2022-23 by Direct Assessment

PEO1		
PLO Code	Target	Results
K1	70%	85.00%
S1	70%	85.00%
S2	70%	86.00%
S4	70%	87.00%
S5	70%	96.00%
PEO1	70%	88.00%

PEO2		
PLO Code	Target	Results
S2	70%	85.00%
S4	70%	87.00%
V1	70%	91.00%
PEO2	70%	87.67%

PEO3		
PLO Code	Target	Results
S3	70%	95.00%
S4	70%	87.00%
V1	70%	91.00%
V2	70%	87.00%
PEO3	70%	90.00%

Comments: PEO1, PEO2 and PEO3 are exceeding expectations (EE) level (85%) in 2022-23.

Improvement Plan:

1. Retain the plan and target level may be increased to 80%.

2021-2022

PEO1		
PLO Code	Target	Results
K1	70%	88.00%
S1	70%	80.00%
S2	70%	81.00%
S4	70%	85.00%
S5	70%	96.00%
PEO1	70%	86%

PEO2		
PLO Code	Target	Results
S2	70%	81.00%
S4	70%	85.00%
V1	70%	88.00%
PEO2	70%	85%

PEO3		
PLO Code	Target	Results
S3	70%	94.00%
S4	70%	85.00%
V1	70%	88.00%
V2	70%	87.00%
PEO3	70%	89%

Comments: PEO1, PEO2 and PEO3 are exceeding expectations (EE) level (85%) in 2022-23.

Improvement Plan:

Nil

PEOs Attainment Comparison (2023-24, 2022-2023 & 2021-2022)

	2024	2023	2022
PEO 1	92	88	86
PEO2	91	88	85
PEO 3	93	90	89

