2.6 Student Performance and Learning Outcome

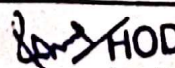## 2.6.2 Attainment of Course Outcomes (COs)

Summary

The Institute of Technology and Management (ITM) uses a robust assessment process to evaluate Course Outcomes (COs) through Direct Attainment (80%) and Indirect Attainment (20%). Direct Attainment includes methods like Activity-Based Continuous Assessment Systems (ABCAS), midterms, quizzes, assignments, and end-semester exams, while Indirect Attainment is measured via surveys, such as Course Exit, Graduate Exit, Alumni, and Employer Surveys. CO attainment is calculated by combining internal assessments (40%) and external university exams (60%), with attainment levels based on the percentage of students scoring 60% or higher. Program Outcomes (POs) and Program-Specific Outcomes (PSOs) are assessed using CO-PO-PSO mapping and feedback from stakeholders, with final attainment based on 80% direct and 20% indirect methods. This ensures continuous improvement of academic programs and enhanced student learning outcomes.

Dean Academics
Institute of Technology &
Management, Gwalior

Dr. Meenakshi Mazumdar
DIRECTOR
Institute of Technology & Management
Gwalior (M.P.)

ITM Campus, NH-75, Opposite Sithouli Railway Station, Gwalior (M.P.) - 475001, India
Mail: directoritmoffice@itmgoi.in, **web:** www.itmgoi.in

1 | P a g e

Department of Computer Science and Engineering

CO Attainment (Academic Year: 2021-22)

S.No.	Course Name	Course Code	Target	CO Attainment
	I - Year			
1	Engineering Chemistry	BT 101	1.3	2.71
2	Mathematics-I	BT 102	2.19	0.64
3	English for Communication	BT 103	1.5	2.5
4	Basic Electrical & Electronics Eng	BT 104	1.4	2.55
5	Engineering Graphics	BT 105	1.2	2.38
6	Manufacturing Practices	BT 106	2.91	2.87
7	Swachh Bharat Summer Internship	BT 108	2.6	2.93
8	Engineering Physics	BT 201	1.5	1.21
9	Mathematics-II	BT 202	2.3	2.12
10	Basic Mechanical Engineering	BT 203	1.8	0.75
11	Basic Civil Engineering & Mecha	BT 204	1.2	1.23
12	Basic Computer Engineering	BT 205	2.41	1.9
13	Language Lab & Seminars	BT 206	2.91	3
	II-Year			
14	Energy & Environmental Engineer	ES 301	1.5	1
15	Discrete Structure	CS 302	1.65	2.41
16	Data Structure	CS 303	1.9	2.67
17	Digital Systems	CS 304	1.65	2.76
18	Object Oriented Programming & N	CS 305	2	2.46
19	Computer Workshop(Java)	CS 306	2.88	2.88
20	Internship-I	BT 107	1.8	2.82
21	Mathematics- III	BT 401	1.06	2.5
22	Analysis Design of Algorithm	CS 402	2.36	2.34
23	Software Engineering	CS 403	1.7	1.2
24	Computer Org. & Architecture	CS 404	1.9	1.16
25	Operating Systems	CS 405	1.6	2
26	Programming Practices(python)	CS 406	2.87	2.88
	III - Year			
27	Theory of Computation	CS 501	2	2.47
28	Database Management Systems	CS 502	2.1	2.42
29	Departmental Elective(Data analyt	CS 503	2	2.47
30	Open Elective(Internet and Web T	CS 504	1.6	1.81
31	Lab (Linux)	CS 505	2.75	2.7
32	Lab (Python)	CS 506	2.86	2.9

HOD
Deptt. of Computer Sci. & Engg.
Institute of Technology & Management
Gwalior

33	Internship-II	CS 507	2.72	2.73
34	Minor Project- I　　　　•	CS 506	2.9	2.9
35	Machine Learning	CS 601	2	0.91
36	Computer Networks	CS 602	2.2	2.19
37	Departmental Elective(Compiler D	CS 603	1.6	1.13
38	Open Elective(Project Managemer	CS 604	1.8	1.11
39	Data Analytics Lab	CS 605	2.66	2.84
40	Skill Development Lab	CS 606	1.8	2.9
41	Minor Project II	CS 608	2.76	2.85
	IV - Year			
42	Software Architectures	CS 701	1.7	2.45
43	Departmental Elective(Big Data)	CS 702	1.5	2.5
44	Open Elective (Cryptography & In	CS 703	1.6	2.57
45	Departmental Elective Lab(Big Da	CS 704	1.6	2.85
46	Open Elective Lab (Cryptography	CS 705	1.55	2.91
47	Major Project-I	CS 706	2.7	2.92
48	Internship-III	CS 607	1.7	3
49	Internet of Things	CS 801	1.7	2.52
50	Departmental Elective(cloud comp	CS 802	2.41	2.47
51	Open Elective(Image Processing)	CS 803	1.6	2.78
52	D/O elective lab(Cloud Computing	CS 804	1.7	2.81
53	Major Project-II	CS 805	2.71	2.94

Deptt. of Computer Sci. & Engg.
Institute of Technology & Management
Gwalior