

Curriculum vs Job Market Alignment Report

Executive Summary

This curriculum analysis reveals strengths in data-focused courses. Data Science (DatSci) and Business Intelligence and Visualization (BIVIS) show high alignment scores, indicating strong preparation for roles in data analysis and business intelligence.

A significant curriculum gap exists in "soft skills." While technical skills are emphasized, areas like communication, project management, and teamwork are underrepresented in the current curriculum.

Recommendations include: (1) Revamping weakly aligned courses to emphasize practical application and industry-relevant projects. (2) Integrating soft skills training across all courses, particularly in project-based learning.

Course	Score (%)	Skills Taught	Matched Skills
DatSci - Data Science — Introduces ...	80	applying machine learning, managing big data, using python, visualizing data...	data analysis, using python, visualizing data...
BIVIS - Business Intelligence and V...	76	communicating data insights, creating dashboards, analyzing data trends...	communicating data insights, creating dashboards...
Info1 - Information Management 1 — ...	69	creating er diagrams, designing databases, developing database applications...	designing databases, developing database ap...
Prog1 - Programming Essentials — Fo...	67	debugging programs, designing programs, implementing programs...	debugging programs, implementing programs...
Info2 - Information Management 2 — ...	66	implementing database security, managing database performance, normalizing...	implementing database security, normalizing...
CloudApp - Cloud-Based Application ...	63	deploying cloud-integrated apps, designing cloud architectures...	deploying cloud-integrated apps, designing cl...
PYTHON - Introduction to Python — B...	61	controlling program flow with python, creating python variables, utilizing python libraries...	using python variables, utilizing python librari...
MobAp - Mobile-Based Application De...	60	developing mobile apps, implementing mobile app features, testing mobile apps...	developing mobile apps, using mobile app de...
THESIS 2 - Thesis 2 — Students deve...	59	deploying ai systems, managing live deployments, performing qa testing...	managing live deployments, performing qa te...
Thesis1 - Thesis 1 — Students propo...	57	applying machine learning algorithms, conducting data analysis, writing technical reports...	conducting data analysis, writing technical pr...
AI - Artificial Intelligence — Cove...	57	analyzing data, applying search algorithms, implementing machine learning models...	analyzing data, implementing machine learnin...
SofEng - Software Engineering — Cov...	56	applying uml, defining software requirements, testing software...	defining software, testing software...
HCI - Human-Computer Interaction — ...	55	applying ux principles, conducting usability testing, designing user interfaces...	designing user interfaces, prototyping guis...
OOPro - Object-Oriented Programming...	55	applying encapsulation, applying object-oriented programming principles...	applying object-oriented programming princip...
WebDev - Web Development Technologi...	55	applying version control, deploying web systems, using modern web frameworks...	deploying web systems, using modern web fr...
SocPro - Social Issues and Professi...	55	analyzing security risks, applying ethical frameworks, implementing security measures...	analyzing security risks, implementing securit...
InfoAs - Information Assurance and ...	54	analyzing malware, applying security controls, managing security incidents...	applying security controls, managing security...
2D - 2D Animation — Covers digital ...	53	creating movement arcs, drawing 2d animation, timing animation...	creating movement arcs, timing animation...

