

D'Amore-McKim School of Business

Masters Platform Proposal (MSX)

Master's Programs Redesign Committee

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Executive Summary

This committee was tasked in November 2017 with analyzing the D'Amore-McKim (DMSB) portfolio of Master's (MS) programs, excluding the Full-Time MBA, Part-Time MBA, and online programs. The committee collected data to assess our current portfolio and market environment, and made preliminary recommendations to the Dean. Data came from multiple secondary sources and from two market analyses commissioned by the committee. From this research and discussions with firms and other resources outside the University, we have developed a final recommendation and proposal.

MBA and general Masters in Management programs are mature and operate in declining markets, but one-year, focused Masters programs are still in growth. The MS Task Force has rationalized the existing MS portfolio, recommended several changes that were implemented, such as the MS in Quantitative Finance (launched FL 19), the on-ground MS in Business Analytics (launched FL 20), and a more technical MS in Accounting. A list of current DMSB Masters programs and their respective enrollments are included in the Appendix. The challenge remains as to how to manage the multiple non-STEM MS programs that DMSB does or could teach, given limited marketing and management resources. This proposal addresses this challenge by creating an MS program architecture with a common core followed by deeper concentrations. The concentrations will include a number of existing, non-STEM MS programs and is a platform for launching new, market-driven programs. This new architecture provides an opportunity for new concentrations and for current classes tied to existing programs to continue being offered in a more efficient manner. The concentrations will be identified on the transcript. This approach allows for enhanced flexibility and critical mass in experiential activities.

Specifically, we recommend creating a new Masters in Science curriculum with a major in Management and a variety of concentrations. The common core will consist of 12 credits, with the remaining 18 credits being electives. Each concentration will consist of 12 credits of the 18 elective credits, allowing for two open electives, one of which may be interdisciplinary and taken outside of D'Amore-McKim. The 30-credit Master's program will also stack into the MBA with the completion of an additional 30 credits. The new platform will give DMSB flexibility to develop new concentrations (based on emerging trends, and student demand) quickly and to develop unique combinations that leverage other schools within the University (e.g., Khoury, Bouve, and others). The platform will also allow DMSB to engage with employers to offer focused, skills-based Masters programs.

The task force created the initial draft of this proposal and was disbanded in April 2019

Master's ("MSX") Platform Proposal

Program Description

The MSX concentration-focused Masters platform will be a flexible, experiential architecture to allow the efficient creation of specialized Masters concentrations. With a small, focused core of market-driven skills, combined with a heavy emphasis on experiential activities, the structure of the program allows for the efficient creation of new Masters degrees that offer the student a deeper dive into specific academic areas. The program architecture consists of 30-credits, with a flexible duration between 8 and 20 months depending on course load.

Design Consideration

Market research done by the committee has identified the following design constraints and opportunities:

- **Experiential**: This is the main competitive strength DMSB, and the new program will leverage the experiential component through a palette of options. This can include course XN projects, employer capstone courses, new venture projects through IDEA and CRI, experiential residencies, and others. All concentrations are encouraged to have an experiential component.
- **Flexible Delivery**: This program allows students to enroll either full-time, part-time or online. Courses are available in all formats. All programs will leverage NUflex technology to enhance delivery. Individual Masters will not consist of closed cohorts. Fixed cohorts limit program and student flexibility.
- **Core**: Consists of 4 domain-specific courses. Students will select one course in each of the following areas: Managing Organizations, Data-Driven Management, Strategy & Growth, and Finance & Operations.
- **Positioning**: The programs derived from the MSX platform cannot be perceived as a generalized Masters in Management, as this market is in decline and is oversaturated in Boston. This is a customizable, flexible degree program with a solid base, breaking the 'one size fits all' mold.
- **Student Flexibility**: Allows students to go through the program quickly or to extend the time required to fit their needs.
- **Market Responsiveness**: The program allows students and corporations the flexibility to customize the curriculum to meet their learning needs, and the skills required in the job market, more effectively. The programs also allows DMSB to be responsive to changes in the market and better serve the needs of our corporate partners.

Proposed Curriculum

MS programs will consist of 30 credit hours, which are typically 10 courses. The committee recommends a core consisting of 12 credits, and 18 elective credits. Concentrations will consist of 12 credits selected from a particular functional area or domain, for students who chose to pursue a concentration. The remaining 6 elective credits are available for students to select from any D'Amore-McKim graduate course or from a selection of interdisciplinary electives at either Khoury, CAMD, COS or CSSH (see below for interdisciplinary elective options). Otherwise students not pursuing a concentration will have 18 credits selected from all DMSB offerings.

Core: The core is envisioned to consist of 4 courses, one from each required competency area: Managing Organizations, Data-Driven Management, Strategy & Growth, and Finance & Operations. These areas were derived from a series of core skill requirements vetted by the Task Force. These are noted in Core Skills in the Appendix.

The program can be completed either full-time, part-time or online. Students can take a variety of on campus and online courses to suit their needs and preferences. The experiential component of the program is expected to be imbedded in a variety of ways including: the use of XN projects in a variety of courses, employer-focused capstone projects, participation in IDEA, CRI projects, The Washington Campus Course, International Field Seminars, the 360 Huntington Fund, experiential residencies, and other options.

Interdisciplinary courses have been vetted and approved by D'Amore-McKim faculty as well as the host colleges as part of the MBA Redesign Task Force in 2017-18. In fall of 2020, Bouve, College of Social Science and Humanities, College of Arts Media & Design and Khoury Computer Science have reaffirmed that the courses listed below would be made available to DMSB MS students as well as MBA students. Critical to program differentiation in competitive markets is the development of enriched experiential opportunities, not found at competitor institutions, and unique to the reputation and expertise of DMSB and NU.

It is expected that students in the Masters can leverage our global campuses where applicable. This can include, for example, the San Francisco Bay Area for innovation and entrepreneurship, and London for finance. This is another competitive differentiator.

A program faculty director may be appointed by the Dean in consultation with the Senior Associate Dean of Faculty. The faculty director responsibilities will include the implementation, oversight, and coordination of concentrations with Group Chairs, other faculty directors, and any faculty or group of faculty seeking to create a new concentration.

Brief Course Descriptions

MSX - Management Core¹

Students will elect one course in each of the following domains/functional areas:

Managing Organizations:

MGMT 6213	Managing Ethics in the Workplace and Marketplace
MGMT 6214	Negotiations
MGMT 6225	Sustainability and Leadership
MGMT 6226	Sustainability and the Business Environment
HRMG 6200	Managing People and Organizations
HRMG 6212	Creating an Innovative Organization
HRMG 6214	A Management Perspective of Human Resource Management
HRMG 6223	Global Talent Management
INTB 6226	Becoming a Global Leader

Data-Driven Management:

ACCT 6200	Financial Reporting and Managerial Decision Making
MISM 6200	Introduction to Business Analytics
MISM 6202	Foundations of Data Analysis for Business
MISM 6203	Business Analytics Methods
MISM 6210	Information Visuals and Dashboards for Business
MISM 6212	Data Mining and Machine Learning for Business
MKTG 6200	Creating & Sustaining Customer Markets
MKTG 6234	Marketing Analytics
STRT 6210	Workforce Metrics & Analytics
SCHM 6215	Supply Chain Analytics

Strategy & Growth:

STRT 6200	Strategic Decision Making in a Changing Environment
MKTG 6216	Market Focused Strategy
INTB 6200	Managing the Global Enterprise
INTB 6260	Advanced Topics in Global Mgmt. & Strategy
ENTR 6200	Enterprise Growth and Innovation
ENTR 6222	Competing in Dynamic, Innovation-Driven Markets
ENTR 6225	Acquisition, Alliance, and Growth
SCHM 6213	Global Supply Chain Strategy

¹ Nine of the courses offered in the Core have pre-requisites, but students who have met the prerequisites are able to register. These courses are not restricted, even if other programs reference these courses. This also speaks to undergrad majors who would not need the introductory course. Two courses, INTB 6226 and FINA 6309 are currently restricted. These will be amended when/if the proposal passes to be allowable for students to enroll.

Finance & Operations:

FINA 6309	Foundations of Accounting and Finance
MKTG 6230	Marketing Performance: Measure, Analyze, Profit
SCHM 6201	Operations & Supply Chain Management
SCHM 6214	Sourcing & Procurement
SCHM 6221	Sustainability & Supply Chain Management
SCHM 6223	Managing Healthcare Supply Chain Operations

The credit mapping is shown below in Table 1.

Table 1. MSX credit mapping.

Core: Required for ALL students

Select one from each category:

Managing Organizations

3 credits

HRMG 6200	Managing People & Organizations
HRMG 6212	Creating an Innovative Organization A Management Perspective of Human Resources
HRMG 6214	Global Talent Management
HRMG 6223	Sustainability and Leadership Sustainability and the Business Environment
MGMT 6225	Managing Ethics in the Workplace
MGMT 6226	Negotiations
MGMT 6213	Becoming a Global Leader
MGMT 6214	Workforce Metrics & Analytics
INTB 6226	
STRT 6210	

Data-Driven Management

3 credits

ACCT 6200	Financial Reporting and Managerial Decision Making
MISM 6200	Intro to Business Analytics
MISM 6202	Foundations of Data Analysis for Business
MISM 6203	Business Analytics Methods Information Visuals & Dashboards for Business
MISM 6210	Data Mining & Machine Learning for Business
MISM 6212	Creating & Sustaining Customer Markets
MRKT 6200	Marketing Analytics
MRKT 6234	Supply Chain Analytics
SCHM 6215	

Strategy & Growth

3 credits

STRT 6200	Strategic Decision Making in a Changing Environment
MKTG 6216	Market Focused Strategy
INTB 6200	Managing the Global Enterprise
INTB 6260	Advanced Topics in Global Mgmt. & Strategy
ENTR 6200	Entreprise Growth & Innovation
ENTR 6222	Competing in Dynamic, Innovation-Driven Markets
ENTR 6225	Acquisitions, Alliances and Growth
SCHM 6213	Global Supply Chain Strategy

Finance & Operations

3 credits

FINA 6309	Foundations of Accounting & Finance
MKTG 6230	Driving Market Performance, Measure, Analyze Profit
SCHM 6201	Operations & Supply Chain Management
SCHM 6214	Sourcing & Procurement
SCHM 6221	Sustainability & Supply Chain Management
SCHM 6223	Managing Healthcare Supply Chain Operations

Electives:18
credits

Students will select 18 credits of electives offered by D'Amore-McKim

Students may elect to take one non-D'Amore-McKim elective from the following list of interdisciplinary electives.

AACE 6000	Arts and Culture Organizational Leadership
ARTG 6310	Design for Behavior and Experience
CS 5100	Foundations of Artificial Intelligence
CS 5200	Database Management Systems
DS 5110	Introduction to Data Management and Processing
ECON 5140	Applied Econometrics
GE 5030	Iterative Product Prototyping for Engineers
GE 5100	Product Development for Engineers
IE 5640	Data Mining for Engineering Applications
IE 6600	Computation and Visualization for Analytics
IE 7374	Special Topics in Industrial Engineering

INTL 5200	Political Economy: Interdisciplinary Perspectives
JRNL 5311	Design for Storytelling
LPSC 6313	Economic Analysis for Law, Policy, and Planning
ME 5645	Environmental Issues in Manufacturing and Product Use
INSH 5301	Introduction to Computational Statistics
INSH 5302	Information Design and Visual Analytics
PPUA 6553	Nonprofit Financial Resource Development

Master's Program Concentrations

As DMSB and NU curriculum evolve, new courses may be added for core domains and interdisciplinary offerings. Faculty in D'Amore-McKim including program directors, Group Chairs, and others are encouraged to propose new courses and concentrations. All proposals will follow DMSB approval processes.

Risk Assessment

This program proposal has very low risk, as most of the courses already exist and are being taught. There are no new courses as the core courses are part of the current D'Amore-McKim offerings.

Appendix

Figure 1. DMSB Masters program enrollment.

	MSQF	MSTE	MSIB*/MSIM	MSI, f2f	MSI online	MSBA f2f	MSBA online	MSA	MST
FL 2020									
APPS	1356	31	180	N/A**	22 SP20	1404	33	115 SU20	N/A**
ADMITS	841	11	79		21	682	27	87	
ENROLLS	35/39~	2	9		17	88/51~	17	53	
FL 2019									
APPS	1221	40	157	21	20 SP19		52	147 SU19	12 FY19
ADMITS	619	26	47	20	18		43	96	11
ENROLLS	87	7	4	13	14		20	66	8
FL 2018									
APPS	1136	24	114	25	19 SP18		16	173 SU18	17 FY18
ADMITS	440	8	39	25	18		12	99	16
ENROLLS	60	3	6	23	15		6	72	11
FL 2017									
APPS	1076	31	113	32	13 SU17		40	182 SU17	17 FY 17
ADMITS	406	18	32	29	13		29	108	16
ENROLLS	66	5	3	24	8		15	53	13

* Prior to FL 2020 curriculum change, and reduction in prerequisite course requirements

**MSI admission was suspended in spring 2020 due to lack of leads and applicants in the pipeline

**MST admission was suspended pending program review, due to low enrollments/FY17-19 represent total enr over 3 intakes

~# of students in Boston FL20/ # of students fully remote FL20, intent to arrive in January. Sum of both cohorts is anticipated total program enrollment

Summary of the Original Task Force observations and recommendations (dated 2017-2019):

1. There is a clear need to simultaneously improve the flexibility and variety of specialized Master's programs while increasing efficiency. This can be accomplished with a robust core of courses, with specialized majors that address the immediate and future needs of our customers (students and employers). This platform can also include STEM courses where needed.
2. Finalize the stand-alone Master's degree program list. We are assuming that accounting, finance, and innovation will remain, but with major changes. Finance is introducing fintech and becoming STEM certified. Accounting is introducing analytics and AI to remain competitive. Innovation will continue to focus on working, mid-career professionals.
3. Concurrently with this proposal, we need to plan on transitioning some programs that will be replaced by the new Master's platform and associated Master's degrees. An example would be eliminating the Masters of Science in Technological Entrepreneurship and replacing with an entrepreneurship Master's version based on the new platform.

4. We need to investigate how this core can be offered as a Management certificate to companies or used to partner up with other Colleges (e.g., CCIS, Bouve, COE) for dual degrees.
5. We need to establish a robust online delivery platform (from 2019 onwards), before launching any new online programs.
6. We need to establish a robust process for reviewing existing and for proposing new programs. Creating Task Forces every 5-10 years is not sufficient to remain market leaders in such a rapidly changing marketplace. Instead, we recommend establishing a new standing committee that will be tasked to review existing specialized MS programs and monitor market dynamics (using data sources we have uncovered and used) on an ongoing basis. Such a committee should focus on strategic development, in contrast to GPAC dealing with day-to-day running of programs.
7. We need to encourage faculty to propose new full-time programs that have proven labor demand from companies and well-defined target segments; and are STEM-certified (to attract international students) and interdisciplinary (leveraging campus experiences and resources). These new programs will also leverage the core platform.

Summary of Current Program Assessment:

1. DMSB's current portfolio of programs is generally undistinguished and is under attack from both local and global competition.
2. All current programs need to either undergo major revisions to remain competitive or should be closed.
3. The programs are priced at the high-end of the market, while being delivered in substandard facilities.
4. DMSB marketing budgets are spread thin, between too many programs.
5. Several programs have extremely low enrollments, although due to efficiencies in running these on top of existing part-time classes, they could potentially remain profitable (full profitability analysis is pending).

Summary of Market Assessment and Need for Change:

1. Emphasizing experiential education in both current and new programs is a 'must', as this leverages DMSB's main point of differentiation and reputation, locally and globally.
2. Part-time programs in Boston are oversaturated so new programs need to be full time to attract students from across the country and internationally.
3. Employers are seeking students with technical skills rather than with just general business knowledge. Employers are also very interested in students evidencing strong personal, interpersonal and self-management skills.
4. Generalist master's (e.g., a Master's in Management) programs are a mature to declining market and represent a crowded competitive landscape.

5. Specialized masters are growing overall, but the growth varies a lot by specialization.
6. There are three marketing segments: international students, recent liberal arts grads, and working professionals.
7. International students have been a major factor in growth, although this growth has begun to slow down lately.
8. International students are seeking programs that are STEM certified, so they can have 3 years of OPT.
9. International students prefer longer and full-time programs.

Tables and data below were obtained from our research and from the Office of Strategic Research & Analytics.

After early strong growth, US enrollment in General MS (Master in Management) programs has stagnated, while the number of programs has increased. In Boston there are already 11 such programs. Furthermore, while such programs have strong positive recognition in Europe, in the US companies recognize the degree less, and starting salaries are quite low, sometimes lower than DMSB undergraduate salaries. Overall, the market research shows that this market is unattractive.

Figure 2. Enrollment growth at AACSB-accredited schools.

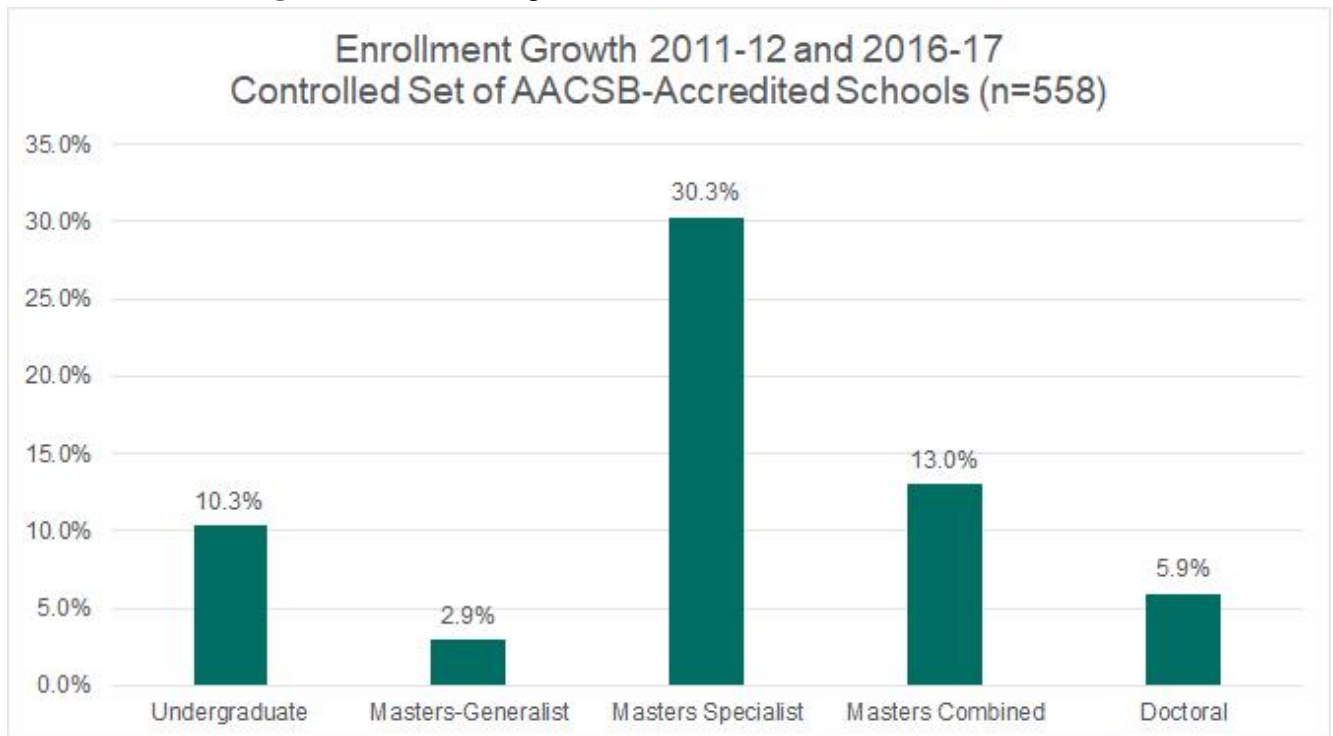
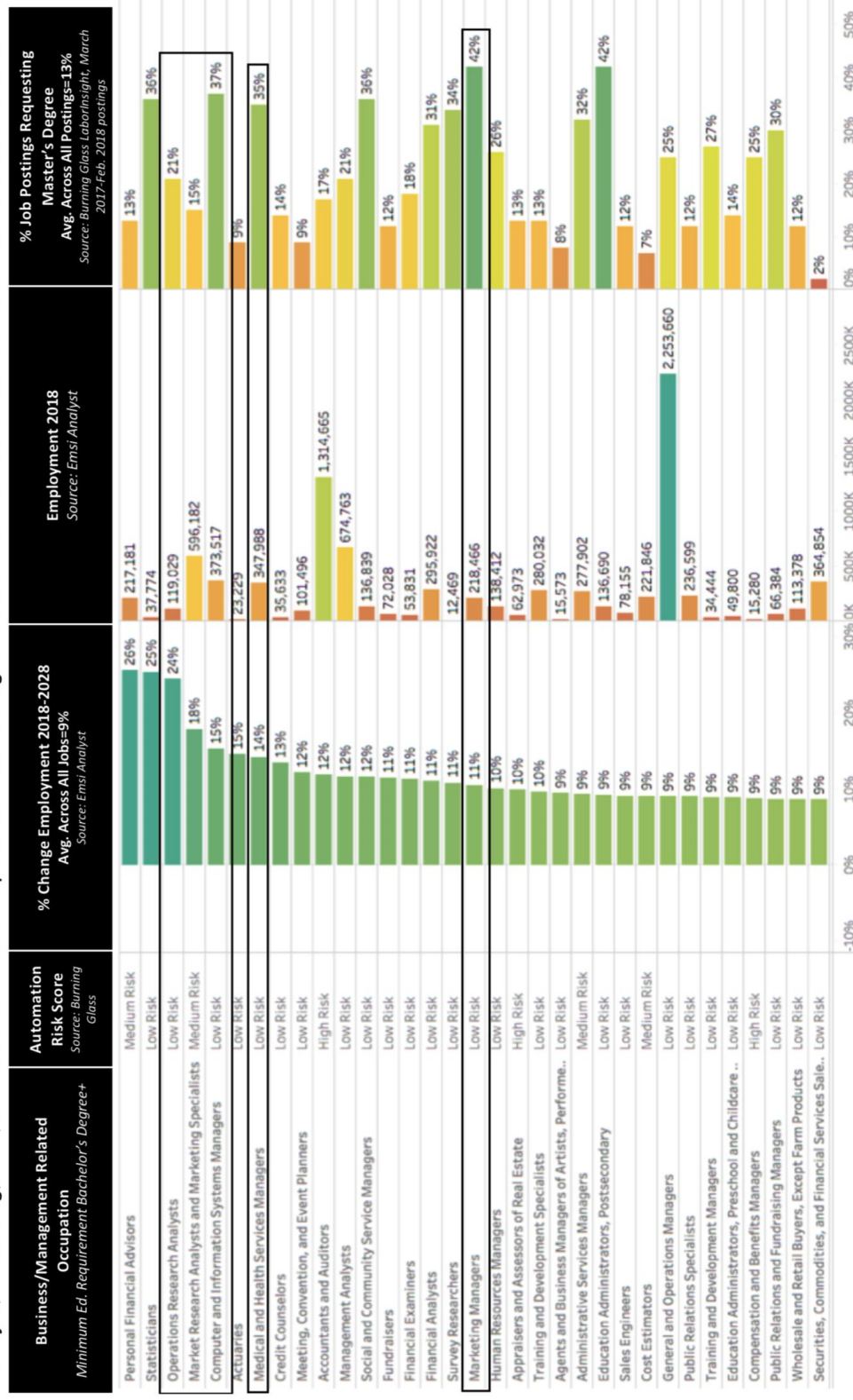


Figure 3. Master's degree occupational data.

Core Student Skills

Large, Fast-Growing Occupations with a High Proportion of Job Postings Requesting Master's Degrees Generally Represent Strong Target Markets for DMSB

Analyst, marketing, tech, and healthcare related positions are among functions in which DMSB should ensure its curriculum covers



Based on research from the Task Force and information provided, a list of core skills needed by graduates was compiled. This list was reviewed by human resource executives at multiple large firms such as General Electric.

- 1: **Understanding Business Numbers:** basics of accounting and finance
2. **Business Analytics:** Stats, analytics, programming, presenting data
3. **Working with People:** working in groups, persuasion, understanding different cultures, leadership, ethics, personal development and self-management
4. **Customer Orientation in All Parts of the Business:** design thinking, understanding motivation and behavior
5. **Business Purpose:** business models, canvas, different types of businesses – non-profit, for, service, product, role of business in a global society
6. **Creativity, Process and Technology:** technology trends and development, innovation processes, project management, mental agility, persistence, design