

## quote(s) – tbv zelfstudie IS/IMM

### uit zelfstudie FEW/CS 2001

**doelstellingen 2001:** Doel van de opleiding Informatiekunde is mensen op te leiden die in staat zijn zelfstandig in teamverband complexe vraagstukken op te lossen inzake inzet, toepassing en gebruik van informatietechnologie. De opleiding profileert zich door een nadruk op multidisciplinaire methodologie betreffende ontwikkeling van informatiesystemen en hun inbedding in de externe context, ten behoeve van het effectief en efficiënt functioneren van mensen en organisaties.

### uit referentierapport

**gemeenschappelijke kern van de opleidingen Informatiekunde – VSNU/CROHO 1999** Informatiekunde richt zich op theorievorming en onderzoek naar het effectief structureren, verwerken en communiceren van informatie en de rol die informatietechnologie daarbij speelt. Informatieprocessen bij individuen en organisaties worden niet alleen uit technisch maar ook uit cognitief, sociaal en bedrijfskundig perspectief bezien.

**varianten** De visitatiecommissie ziet Informatiekunde als het integreren van informatietechnologie en informatiemanagement met een of meer andere wetenschappen. Deze wetenschappen kunnen verschillende zijn, al naar gelang de invalshoek die opleidingen kiezen.

**standaard** Een internationale standaard voor de informatiekundige opleidingen is het door de Association for Computing Machinery (ACM) en door Association for Information Systems (AIS) ontwikkelde modelcurriculum voor de opleidingen op het vakgebied Information Systems. Voor dit modelcurriculum verwijzen we naar J.T. Gorgone, P. Gray e.a.: MSIS 2000, Model Curriculum and Guidelines for Graduate Degree Programs in Information Systems, ACM, AIS, 1999. See online(s)

### uit VU/FEW online informatie

**IMM** Informatie, multimedia en management (IMM) slaat de brug tussen informatie- en communicatietechnologie (ICT) en de maatschappelijke toepassing daarvan. Als informatiekundige ben je de verbindende schakel tussen de ontwerpers van de ICT en de mensen die ermee werken. Tijdens de opleiding leer je ICT zo in te zetten dat het optimaal aansluit bij de wensen van de gebruikers. Je leert begrijpen hoe mensen en organisaties tegen informatie en computers aankijken, ook wanneer ze weinig verstand hebben van de technische kant ervan.

**IS** Information Sciences: the application of technology

Information Sciences is the multidisciplinary field spanning Information and Communication Technology (ICT) and its practical application in society. The thrust of the programme is on:

- How information is created and processed
- The practical application of technology
- People, organizations and cultures

Focus of the programme: Information Sciences combines technology and organizational studies on the one hand, and technology and culture on the other. It features contemporary subjects that keep pace of the rapid developments within this sector. The programme focuses on Web applications and Internet research of the future e-society, like e-business, e-culture, e-entertainment, e-communities.

### from ACM/AIS – MSIS 2000

**context:** The model curriculum for graduate degree programs in information systems is based on the typical degree structure in USA and Canadian universities. It is a model for a Master's Degree in Information

Systems and not a concentration or option in an MBA program. Placing this model curriculum within a specific context allows it to be directly applicable to designers in the USA and Canada and avoids the difficulties of considering a large number of educational systems. However, the Master's Degree program in Information Systems can be a useful reference for designers of information systems degree programs outside the USA and Canada.

**change(s)** University-level Information Systems (IS) curricula need frequent updating to remain effective. Model curricula developed by task groups from professional societies aid universities in their curricula development and updating efforts by providing four inputs:

- The common body of knowledge that graduates are expected to know. This helps counter local requirements bias and helps graduates to be prepared for positions in a large geographic area.
- A program structure with suggested courses and course sequences.
- Rationale for the program and the resources required for it.
- Rationale for investment in faculty development to keep faculty members up to date with rapidly changing technology.

**model curriculum:** A set of underlying principles and philosophy was used to guide the development. Essential career development skills including oral, written, and presentation skills; people and business skills; and ethics and professionalism are integrated throughout the curriculum and its individual courses.

## **msis200 buiding block(s)**

The curriculum model is designed as a set of interrelated building blocks.

**Foundations:** At the foundation level, the curriculum is designed to accommodate students from a wide variety of backgrounds. In particular, the model specifies the business and information systems skills required as prerequisite to the rest of the curriculum.

**Core:** The next level, or core, is a set of primary courses. All graduates require this common core. Some of the core courses are similar in name to those in the 1982 Curriculum, but the contents are a major revision reflecting the changes in the Information Systems field. The core courses are:

- Data management
- Analysis, modeling, and design
- Data communications and networking
- Project and change management
- IS policy and strategy

**Integration:** A major innovation in this curriculum is in the integration component required after the core. This component addresses the increasing need to integrate a broad range of technologies and offers the students the opportunity to synthesize the ideas presented earlier and to help students implement comprehensive systems across an organization.

**Career Tracks:** Another innovation is that the program architecture is flexible to accommodate individual institutional requirements for an MS degree. This flexibility occurs at both the entry level with the foundation courses that can be tailored to meet individual needs and at the highest level where institutions and students may select specific career tracks that are representative of current organizational needs.

## model curriculum – set of standards

The model curriculum is designed to serve as a set of standards upon which individual schools can base their curriculum. It is compatible with MS programs ranging from 30 to 60 or more units offered in a variety of locations in the university, including business schools, schools of information systems, computer science departments, and liberal arts schools. By adopting this curriculum, faculty, students, and employers can be assured that MS graduates are competent in a set of professional knowledge and skills, know about a particular field in detail from the career track, and are instilled with a strong set of values essential for success in the Information Systems field. In short, it is a program that reflects current and future industry needs.

## objective(s)

**skill(s):** A second objective is to help overcome the skill shortage that exists and is expected to continue in the years ahead. Students graduating with an MS degree should possess enough skills that they can take on responsible rather than entry-level positions and can serve as mentors to people with lower levels of education.

## PRINCIPLES OF THE MSIS DEGREE

The following underlying principles and philosophy were used to guide the development of the MSIS curriculum.

**Professional Degree.** The MSIS is a professional degree that integrates the information and organizational cultures. We recognize the difficulties that people trained purely in one professional culture have in communicating with each other. We believe that MS graduates should have the knowledge and sophistication to bridge the existing chasm.

**Value Added.** The degree adds value to students studying beyond the bachelor degree. Students invest a year or more of their lives and organizations often sponsor the student financially. Both are entitled to a return on their investment.

**Core.** The degree includes a consistent set of information systems core courses that are offered by all institutions. As a result, employers are assured that MS graduates are competent in a fundamental set of professional knowledge.

**Flexibility.** The curriculum is flexible to accommodate students with differing backgrounds, skills, and career objectives. Full-time students with a specific background in IS should be able to complete the program in a year. Students lacking prerequisite knowledge should expect to take at most one additional year to complete the MS degree. This model (based on the curriculum architecture used by many MBA programs) allows all students to graduate with a specified level of competence.

**Career Tracks.** The program focuses on current and emerging concepts through .career tracks.. These tracks should allow students (within the competency of the faculty) to .major. in a specific subject area for which there is demand and to achieve breadth across a topic area.

**Integration of Non-technical Skills.** Oral, written, and graphic presentation skills; promoting ideas and negotiating; people skills; business skills; team skills; customer orientation; realworld focus; and ethics and professionalism are integrated throughout the program. Each topic is important and, some might argue, each is worth a course of its own. However, given the limited time available for MS work, we believe that the appropriate way for these topics to be presented is by integrating them tightly into the courses. Furthermore, despite their importance, these topics are exceedingly difficult to teach in the abstract.

**Unit Requirements.** The program architecture is flexible and compatible with institutional unit requirements for an MS degree. These requirements range from 30 to 60 units, depending on the individual school.

Schools with long programs are able to extend their offerings beyond the 30 unit minimum to go into greater depth in the prerequisites, the core, and the career tracks.

**Practicum.** A practicum is recommended as an integrating mechanism to provide real-world experience for the student. A practicum is a term-long project solving a real problem for a real client against a time deadline. For full-time students, it is recommended that they work in teams and that industry supports the project by providing stipends to the students for their work because the financial incentive has been shown to improve the relevance of the project topic and the quality of the student output. For part-time, working students, a project for their employer is usually appropriate as a practicum. At some universities, the practicum also fulfills graduation requirements in that the practicum provides a culminating experience in lieu of a master's thesis.

**Integrating Capstone Course.** The program includes an integrating capstone component. Master's courses are typically treated as independent entities. As a result, students are not able to see or understand how the pieces integrate into a whole. Some schools have created capstone courses, usually built around policy and strategy. However, such a course focuses only on the integration of information systems with the business enterprise and on the role of the CIO. Systems integration is also an important aspect of information systems work that most students will be involved with during their professional careers.

### pre-requisite(s)

These general principles lead to the idea that programs should ensure that students have solid foundations in information systems and business either before they enter or through a specific set of courses.

## IS Curriculum Wiki

### qualification(s) – (wiki):

1. IS professionals exist in a broad variety of domains, including, for example, business, health care, government, and non-profit organizations. They must have a strong real world perspective. It is, therefore, essential that they understand that: ...
2. IS professionals must have strong analytical and critical thinking skills. Students must therefore: ...
3. IS professionals must exhibit strong ethical principles and have good interpersonal communication and team skills. Students must understand that:
4. IS professionals must design and implement information technology solutions that enhance organizational performance. Students must therefore: ...

**Information Systems as a Field of Academic Study** Computer-based information systems have become a critical part of the products, services, operations, and management of organizations. The effective and efficient use of information and communications technologies is an important element in achieving competitive advantage for business organizations and excellence in service for government and nonprofit organizations. The information technology or information systems strategy is an integral part of organizational strategy. Information systems support management processes at all levels of management (operational, tactical, and strategic). Information systems are vital to problem identification, analysis, and decision making. The importance of information technology and information systems to organizations and the need for well-educated professionals in the field is the basis for a strong link between educational programs and the professional community of IS practitioners (Mawhinney, Morrell, and Morris, 1994; Trauth, Farwell, and Lee, 1993).

Information Systems as a field of academic study began in the 1960s, a few years after the first use of computers for transaction processing and reporting by organizations. As organizations extended the use of information processing and communications technology to operational processes, decision support, and competitive strategy, the academic field also grew in scope and depth. An IS organization function emerged to manage computer and communications technologies and information resources within an organization. In the same way that universities have degree programs reflecting important organizational functions, such as financial resource management, marketing resource management, and human resource management, a

degree program emerged for management of information technology and information resources. During this 30 year period of growth and change, different names have been used and the definition of the field has been enlarged. The simple term Information Systems (IS) has become the most commonly accepted, generic term to describe the discipline.

**Scope of Information Systems** Information Systems as a field of academic study encompasses the concepts, principles, and processes for two broad areas of activity within organizations: (1) acquisition, deployment, and management of information technology resources and services (the information systems function) and (2) development, operation, and evolution of infrastructure and systems for use in organizational processes (system development, systems operation, and systems maintenance). The systems that deliver information and communications services in an organization combine both technical components and human operators and users. They capture, store, process, and communicate data, information, and knowledge.

**qualification(s)** Information systems professionals work with information technology and must have sound technical knowledge of information and communication technologies. Since they operate within organizations in a multitude of domains (such as business, health care, government, etc.), they must also understand organizations and the functions within organizations (accounting, finance, marketing, operations, human resources, and so forth). They must understand concepts and processes for achieving organizational goals with information technology. The academic content of an information systems degree program, therefore, includes information technology, information systems management, information systems development and implementation, specialized functions within a domain, and concepts and processes of organizational management.