Master of Agriculture in the Meat Industry

Introduction

According to the Texas A&M University Catalog (2014-2015), the Master of Agriculture (M.Agr.) degree is designed for a student who wants professional graduate training with a management orientation in agriculture, food and natural resources, and it is intended to emphasize the problem-solving skills involved in the use of science and technology to benefit humanity, not as a research degree.

The M. Agr. in the Meat Industry (MAgrMI) program is designed to provide baccalaureate-educated students with supplemental coursework in addition to practical experience (e.g., internships) to prepare them – as graduates – for a variety of careers in, and for future leadership of, the US meat industry. An essential goal of the program is to provide students with a core set of skills (in meat science, management, marketing, communication and leadership) considered to be vital in the meat industry, and to guide students in customizing the supporting internships based on specific career-path interests.

Job Market Need

Texas ranks first among states in production of cattle, sheep and goats and in exports of beef, veal, hides and skins. Companies in Texas that produce, process, distribute and sell meat and poultry products employ 147,820 people in the state and generate an additional 343,260 jobs in supplier and ancillary industries. According to the American Meat Institute (2013), with regard to annual impact of the meat industry: (a) the state of Texas generates 491,000 jobs, $18.4 billion in wages and $73.7 billion in total economic output, and (b) the United States generates 5.9 million jobs, $235.9 billion in wages and $894.4 billion in total economic output.

Description of the Program

The MAgrMI program is intended to broaden and expand the knowledge and experience of young people who wish to enter the professional workforce of the US meat production, processing and sales industry as supervisory or middle-management personnel. Whereas traditional graduate programs in Meat Science (i.e., M.S. and Ph.D. programs) have a proven record of success focusing on the preparation of young scientists to conduct research, perform food quality/safety functions and initiate product development efforts, the MAgrMI program will emphasize the process of accelerating the climb up the corporate management ladder by exposing baccalaureate-educated students to the tutelage of veteran industry experts with records of previous industry success.

In addition to supplemental coursework, the MAgrMI program will provide opportunities for direct interactions between/among students and industry experts via seminars, individual contacts, small-group interaction conclaves, and experience via industry internships. Opportunities will be created for students to "shadow" first-, second- and third-party audits and training sessions for animal welfare (e.g., PAACO, AMIF), food safety (e.g., HACCP) and Global Food Safety Initiative quality/hygiene/safety (e.g., BRC, SQF). To accomplish the latter objectives, the assistance of commercial auditing companies (e.g., Where Food Comes From, Progressive Beef, Validus, Food Safety Net Services) will be solicited. Internships will be requested through the auspices of government agencies (e.g., FSIS-USDA, AMS-USDA) and organizations/associations (e.g., SMA, USMEF, NAMI, NCBA, NPPC) as well as meat packing, processing and retailing organizations (e.g., JBS-USA, Cargill Meat Solutions, National Beef Company, Tyson, Safeway Stores, HEB, Kroger, Harris Ranch Beef Company, Nolan Ryan Beef Company, Meyer Natural Angus, Sysco). Both active and retired industry veterans (e.g., Todd Bacon, Alfred Bausch, Gina Bellinger, John Bellinger, Scott Boleman, Shanna Boleman, Rod Bowling, Ken Bull, Berry Carpenter, Glen

Dolezal, Joe Don Eilers, David Grams, Jim Lanier, Molly McAdams, Herb Meischen, Brad Morgan, Nick Nickelson, Don Rea, Homer Recio, Billy Rosenthal, John Ruby, John Saunders, Leann Saunders, Phil Seng, Sharon Woods, Bob Zinke) who are experts in their respective areas will be asked to spend time, on campus, educating MAgrMI students.

Objectives

(1) Provide fundamental and scientific knowledge regarding the production of meat animals and the processing of their products, thereby strengthening students' understanding of principles and practices important to those in the meat industry.
(2) Provide technical knowledge relative to the assessment and preservation of value, quality, palatability, shelf-life, wholesomeness and safety of animals and/or meat products to improve students' understanding of industry practices, regulatory requirements and mechanisms/systems for evaluation, management and marketing.
(3) Provide, in collaboration with TAMU colleagues (from, for example, the Departments of Agricultural Economics, Agricultural Leadership, Management, Marketing and Poultry Science), fundamental exposure to interpersonal communication and employee management skills development, thereby enhancing students' ability to relate to and supervise employees under their direction upon achieving full-time employment.
(4) Provide opportunities for students to have interactions with veteran industry experts and to be involved in training sessions and/or audits for animal welfare, food safety and Global Food Initiative food quality/hygiene/safety endeavors.
(5) Enforce a requirement of two short-term (10 to 12 week duration) profession internships within the US meat industry, requiring students to document assigned tasks/responsibilities while participating in the internships and documenting "on-the-job" learnings related to, and reinforcing concepts and practices taught in the classroom or learned from industry experts.

Details of the Program

Details of "Degree Information/The Degree of Master of Agriculture" are provided on pages 86-90 of the Texas A&M University Graduate Catalog (Graduate and Professional Catalog, 2014-2015). The following are additional items specific to the MAgrMI program:

a)Residence. Ideally, the MAgrMI program would be a continuation of a BS degree emphasizing meat, animal or food science but could also be used as a "refresher" or "retooling" option for people with a baccalaureate degree and an industry background wanting to advance their careers in the meat industry. Either way, the MAgrMI candidate must complete two full semesters of classes—in residence, at the TAMU-College Station campus.

b)Entrance. 1)The student will apply to graduate school at Texas A&M University for a Master of Agriculture degree in Animal Science. 2)Additionally, the student will write a letter requesting admission to the MAgrMI program, with one addressed to Dr. David Forrest (or the then-current Associate Head for Graduate Programs) and the other addressed to Dr. Gary Smith (or the then-current chair of the MAgrMI Executive Committee), both at to 2471 TAMU, College Station, TX 77843. 3) The student will complete an additional, but separate, application form to be evaluated by the Executive Committee. Students deemed "acceptable" by the Executive Committee, based on the written applications, will be awarded an interview. The student's acceptance into the program will be determined by the Executive Committee from the written material and performance during the interview.

c)Student advisory committee. In the Department of Animal Science, Meat Science Section personnel who are members of the Graduate Faculty are: Dr. Gary Acuff, Dr. Alejandro Castillo, Dr. Kerri Gehring, Dr.

Jason Gill, Dr. Davey Griffin, Dr. Dan Hale, Dr. Chris Kerth, Dr. Rhonda Miller, Dr. Wes Osburn, Dr. Jeff Savell, Dr. Gary Smith and Dr. Matt Taylor. Members of the MAgrMI Executive Committee are, from Animal Science, Drs. Gehring, Hale, Kerth, Miller, Savell and Smith; because some students with a BS in Poultry Science may wish to pursue a MAGrMI, Dr. Christine Alvarado, a member of the Graduate Faculty in Poultry Science, has agreed to serve as a member of the MAgrMI Executive Committee.

The student's advisory committee for the MAgrMI degree will consist of 3 to 5 members. Any member of the Meat Science Section who is on the Graduate Faculty and Dr. Alvarado may serve as Chair of the student's advisory committee. At least 1 member of the student's advisory committee must be a member of the MAgrMI Executive Committee. At least 1 member of the student's advisory committee must be a TAMU Graduate Faculty member from a Department other than Animal Science.

d)Degree plan. The student's advisory committee, in consultation with the student will develop the proposed degree plan.

e) Credit requirement. A minimum of 36 hours is required for the MAgrMI degree. Approximately 12 credit hours are to be taken outside of the student's degree option

f) Transfer of credit. Courses taken in residence at an accredited US institution or approved international institution with a final grade of B or greater might be considered for transfer credit if, at the time the courses were completed, the courses would be accepted for credit toward a similar degree for a student in degree-seeking status at the host institution.

g)Limitations on the use of transfer, extension and certain other courses. Certain courses may be used toward meeting credit-hour requirements for the MAgrMI under the following limitations:

Maximum credit hours allowed in the degree plan:

- Transfer credit hours = 12
- Credit hours taken post-baccalaureate but not in degree plan = 12
- Advanced undergraduate courses (300 or 400 level) = 9
- ANSC 681 Seminar = 2
- ANSC 684 Professional Internship = 8
- ANSC 685 Directed Studies = 8
- ANSC 690 Theory of Research = 3
- ANSC 691 Research = 0
- ANSC 693 Professional studies = 3
- Any combination of ANSC 684, 685, 690, and 693 = 9

In a degree plan consisting of a total of 36 credit hours, there must be at least 21 hours of "Required Courses" and at least 15 hours of "Prescribed Elective Courses".

The list of approved Required Courses from which 21 hours are to be selected follows:

ANSC 681	Seminar	up to 2 hr
ANSC 684	Professional Internship	up to 8 hr
ANSC 647	Technology of Meat Processing & Distribution	3 hr
ANSC 667	Industrial Processed Meat Operations	3 hr
ANSC 689	Current Issues in Animal Agriculture	3 hr
ANSC 657	HACCP Systems (may have taken as UG)	
or		3 hr
ANSC 637	Food Safety Policy & Regulatory Issues	
ANSC 489	Stats - Applied Data Management (may have had as UG)	
or		3 hr
ANSC 489/689	Quality Food Systems (Osburn)	

The list of approved Prescribed Elective Courses from which 15 hours to be selected follows:

ANSC 607	Physiology & Biochemistry of Muscle as a Food	3 hr
ANSC 627	Carcass Composition and Quality	3 hr
ANSC 687	Sensory Evaluation of Food	3 hr
POSC/FSTC 611	Poultry Further Processing	3 hr
POSC 628	Advanced Poultry Meat Further Processing	3 hr
AGEC 619	Managerial Economics in Agribusiness	3 hr
ALED 401	Professional Leadership Development	3 hr
MGMT 658	Managing Projects	3 hr
MGMT 675	Leadership in Organizations	3 hr
MKTG 621	Survey of Marketing	3 hr
MKTG 650	Analysis of Consumer Behavior	3 hr
MKTG 671	Product Innovation	3 hr

*Other Elective Courses may be approved by the student's advisory committee.

FALL COURSES

	Mon	Tues	Wed	Thurs	Fri
8:00		ANSC 657		ANSC 657	
8:30					
9:00					ANSC 681
9:30					
10:00					
10:30					
11:00		ANSC 647		ANSC 647	
11:30	ANSC 489 stats		ANSC 489 stats		ANSC 489 stats
12:00					
12:30	MKTG 621		MKTG 621		
1:00	MKTG 650	AGEC 619	MKTG 650	AGEC 619	
1:30					
2:00		MGMT 658		MGMT 658	
2:30	MGMT 675		MGMT 675		
3:00	ANSC 607 MGMT 675		ANSC 607 MGMT 675		
3:30	ANSC 607		ANSC 607		
4:00		MKTG 671		MKTG 671	
4:30					
5:00					
5:30					

POSC 628 - WEB

SPRING COURSES

	Mon	Tues	Wed	Thurs	Fri
8:00		ANSC 627 Odd yr/ 637Even yr		ANSC 627 Odd yr/ 637Even yr	
8:30					
9:00	ANSC 489 stats		ANSC 489 stats		ANSC 681 ANSC 489 stats
9:30	ANSC 489 stats MGMT 658	ANSC 489/689	ANSC 489 stats MGMT 658	ANSC 489/689	ANSC 681 ANSC 489 stats
10:00	MGMT 658		MGMT 658		
10:30	MGMT 658		MGMT 658		
11:00		ANSC 667		ANSC 667	
11:30					
12:00					
12:30					ALED 401
1:00					
1:30	MKTG 621		MKTG 621		
2:00	ANSC 687 MKTG 621		ANSC 687 MKTG 621		
2:30					
3:00					
3:30					
4:00					
4:30					
5:00					
5:30					

h) Foreign language. No specific language requirement exists for the MAgrMI degree.

i) Final examination. To be eligible to take the final examination, a student's GPR must be at least 3.000 for courses on the degree plan and for all courses completed at Texas A&M University which are eligible to be applied to a graduate degree, and no unabsolved grades of D, F or U can occur for any course listed on the degree plan. A professional paper, which is a scholarly report of a problem-solving nature, will be prepared by each student. The professional paper must be submitted to the student's advisory committee for approval prior to the final examination. The final examination will cover all work taken on the degree plan and at the option of the committee may be written, oral, or both.

j) Time limit. All degree requirements must be completed within a period of seven consecutive years for the degree to be granted. Enrollment intentions are for new students to enter the program in June; those students should normally complete all requirements for the degree by the end of August of the next calendar year (15 months later). Ideally, students would complete an internship the first summer, 15 credit hours of on-campus courses in each of the first and second semesters, plus a second internship the second summer.

k) Application for degree. A candidate for an advanced degree who expects to complete his/her work at the end of a given regular or summer semester must apply for graduation by submitting the electronic application for degree to the Office of the Registrar and by paying the required graduation fee to the Student Business Services no later than the Friday of the second week of the fall or spring semester or the Friday of the first week of the first summer term.