Heather: Hello there, this is Heather Sprandel, coming to you from the Sam M. Walton College of Business at the University of Arkansas. This is the career center’s podcast called CareerCast and today I am excited to invite three folks from the Information Systems department here in the Walton College to talk to you all today. I am going to let themselves introduce themselves to you because there are some interesting guests. So let me start with Christine to my right.

Christine: Good Morning Heather, I am Christine Davis and I am a faculty member at the Walton College. I graduated from the University of Arkansas in 1987 with a master’s degree and came back and got my Ph.D. recently and have stayed as an executive in residence.

Heather: Great, Thank You, now how about you.

Ely: My name is Eli Bozeman; I am a senior here in the information systems department. I also have a minor in economics and the ERP certificate of completion.

Heather: Great, thanks for being here, Jeff.

Jeff: I am Jeff Mullins I have been here a little over a year and a half now. I graduated with a computer science degree in 1997 from the Fulbright College, back before they merged with the College of Engineering. And I got my Masters Degree here, from the Walton College in 2006.

Heather: Great, thank you all for being here today. We are going to give you a brief overview of Information Systems, the undergraduate degree option. It is exciting, so we are going to talk about the many facets of the program to give you a kind of overview of ISYS. Let’s talk about that, just giving an overview of what ISYS is for the students. I think Christine you are going to share that with me.

Christine: Yes, the information systems field was actually developed back in the 1960s and 70s to bring the use of computers into the business world. Prior to that computers were used mostly for scientific purposes but not widely used in the business environment because there weren’t a lot of applications written to address business needs. In addition, sometimes business people had kind of a difficult time communicating with the computer scientists and computer engineers who wrote most of the programs back then. So the information systems major is actually a business degree, but we take a few technical classes so that we can understand software development. And the ISYS professional acts as sort of the go between or a bridge between the technical people and the business people and the business environment.

Heather: Very good, okay great. It would be nice to know a little bit about the classes that an ISYS major will take. Perhaps Jeff you could start with that.

Jeff: Sure I’ll talk very briefly about a few of the core classes that every ISYS major will take. The first is the Introduction to Information Systems, which is kind of a broad brush overview of a lot of the technology. And then you kind of get into more of the business application with Systems Analysis and Design class. In that class students learn how to do basic requirements analysis, gather requirements from business users, translate those into some sort of system design that they can hand off to the technical people who will actually implement. Now we could generate some technical people too. The next course is Visual Basic .Net, it is kind of how to be productive and develop business applications quickly in a modern development environment. So you will get some programming skills in this degree, but it is not programming centric. Another course that is key for understanding how business and information systems work together is Centralized Data Management or Database. Now that is one that I teach every fall and I enjoy teaching it and I had Eli in class last semester. In that class you really the businesses needs as far as the data they need to capture, the processes they need to implement, and model those and translate those at a more detailed level into something that is going to solve a business problem. Finally, kind of the capstone course in the program is a projects course where you are given one or more real world projects to implement as a group and you are actually solving these business problems, delivering solutions, documenting those solutions, providing training and things like that.
Heather: That’s great, okay and Eli you are going to share a little information about classes too.

Eli: Yeah, there are a couple points that are interesting about our program. The first one is that all of the software really is real world and the more I talk with a lot of the corporations that are doing the hiring I am impressed that what we use is what we will be using once we do take our positions. Also the program is really designed that all of the classes really do play on each other. A lot of the classes I won’t really know as much as I would like to, and then by the next one I kind of have to re-learn it and then advance on that. I really feel like I am getting a good understanding of what will be expected of me when I do start my job.

Heather: That’s great! There are some misconceptions I think about ISYS as a major. What do you think some of those misconception are?

Jeff: One of the things I hear from a lot of the students who are interested in business is that ISYS is a technical degree. There is a big difference between ISYS and computer science or computer engineering. As an undergraduate with a computer science degree, I can tell you we focused on algorithms, writing the most efficient code possible, creating a database management system, creating a programming language, some really detailed stuff that is not of a lot of direct use to a business. When I came back and got my graduate degree in information systems. I had some business context, I had about ten years experience in the industry, but it really kind of put it all together for me, how technology can be put together to solve business problems directly, not from a level of very detailed coding. But, actually taking the tools that are available to you whether they are bought off the self or purchased and customized or developed from scratch and really applying those to solve business problems.

Christine: Heather, I think some other misconceptions out there about the information systems profession are that there are no jobs since the dot com bust. Actually, right now information systems is one of the fastest growing of jobs right now. The number of job openings for IT professionals nationwide has increased by about 50% over the past couple of years. And there are at any one time about 186,000 jobs open daily in the US for IT majors. Currently we have about 120 job openings on eRecruiting Experience for ISYS majors and we only have about 25 ISYS majors graduating this semester. That means there are multiple jobs available for every graduate in the ISYS major. Currently, our graduates are getting offers between $50,000 and $60,000 a year for undergraduates. So, it is quite a good profession and there are good job opportunities right now. Another misconception that is out there about ISYS graduates or majors is that a lot of these jobs are going to be exported to China or to India. Actually, we really haven’t seen a lot of that happening. There have been more business, professional, and technical jobs that have moved to the U.S. from other countries than have actually been exported over the last couple of years. In addition, about 80% of the jobs or the projects that have been outsourced have been moved back to the U.S. So I think that there is a real misconception out there about jobs leaving the U.S. when in actuality that isn’t true.

Heather: And I’ll just reinforce that by saying we don’t have enough students to fill all of the positions that are being recruited through the career center. So, yes I agree with you 100%, so thank you for that. Let’s talk about the skills a little bit more in depth that students gain from being in the ISYS major because you talk about solving problems within business, that is a great thing, but what are the specific skills someone gains from the classes to be able to solve those problems. Eli maybe you can share some about that.

Eli: Okay, I really feel that they really make sure we work as a team and it was a little rough at first when we first started out in the core business classes, but since then we have really gained efficiency. We know each other pretty well, we know our professors pretty well, it is a small enough program. And just as a team problem solving I’ve really improved with and if nothing else, if in haven’t gotten anything else from the program it is the interview from the different companies has been almost exactly what my experience has been at the college. Almost every single question that is asked of me, I have very specific experience dealing with that. So I feel, again, that it has prepared me for the real world.

Heather: It sounds like in your classes you are using real world application and experiences within the classes that are then transferable immediately into business and industry. Is that right?
Eli: That’s right.

Jeff: I can expand a little bit more on that. We have a enterprise resource outreach program, where we have industry partners who are helping us out with donations of software and hardware so that we can have this real world infrastructure. We work with companies including: Microsoft, SAP, IBM, and TerraData. They have all been wonderful partners and we have this real world software that we share with the students, putting in the hands of our students, and giving them these real world skill sets to work with the hardware and software provided by these companies.

Heather: That’s great, that’s really great. So with those skills you are preparing students for what types of careers after graduation?

Jeff: There are a lot of careers in information systems and that kind of goes back to one of the misconceptions. That if I am a Information systems major I am going to be into dark hole programming. That’s actually less often the case for Information Systems than for computer science. You will get a lot of business analysts, people who are going out and working with business users to gather requirements to figure out what problem needs to be solved. You are going to have people who are modeling that data, taking these business requirements and translating them into some sort of data model a programmer can use, you can have people doing business intelligence work. Taking mountains of data that have come from multiple systems and trying to find useful information. Things that are actionable by the company that really drive good decision making. Project management is a big one, Eli was talking about project management and some of those.

Eli: Something that I really think is interesting is that every type of company is going to have an information systems department. So it is not really specific to anyone area that you are getting into just about anything you want to do, you can do within information systems and can expand out from that into the company.

Heather: That’s great, good to hear. I have a question that just comes to me over time, hearing you all speak about your major. Do you see information systems as a major that someone once you graduate with this degree they would need to come back and continue their education, perhaps? Because technology you need to stay advanced in and up to date with certainly. Would you suggest three years out an ISYS major to pursue a master’s degree or continue with continuing education courses? I’m just curious hearing you all want to stay current with technology, what do you suggest?

Jeff: That is going to be an opportunity or problem, depending on your perspective, for people who get into a position, sometimes employers take care of that, and constantly update their employers training, and some employers are wonderful about that. Others will put you supporting a legacy system that was written in a language that you didn’t even know until you got into the major or industry.

Heather: Certainly it is something that I just thought of hearing you all say you are solving problems. So what I hear you saying is that it will depend on the company you go to work for, perhaps, and what type of technology they are currently using, how quick they are to implement new technology, is that right?

Christine: Heather I think a lot of times people return for a graduate degree, not to update their technical skills, but to update their management skills. I think that I have seen that a lot more often where you have a person with an undergraduate degree maybe in computer science or information systems and they have been working in sort of a technical job and at some point they want to move up in the management ranks of their organization and they’ll return to the university to get a masters degree in information technology to sort of polish up those management skills.

Heather: Great, okay!

Jeff: And we actually have a part-time degree offering a professional masters degree of information systems program. That is the program that I went through while I was in industry and it is a great program to go through and if any of you would be interested in it either soon after graduation or two or three years down the line feel free to contact me.
Heather: Okay, great! I don’t know if we addressed this earlier, but we were going to discuss, jumping back to one of the questions I asked earlier about classes that non-ISYS majors could take, perhaps?

Christine: In addition to our undergraduate degree out of the information systems department we also offer a series of courses that are designed for non-IT majors called the ERP classes. In this particular series of classes we focus on the business process and what it looks like to both the user and the developer environment. We use a set of software called SAP which is software that most Fortune 500 companies use. The classes are non-programming oriented so they are really designed both ISYS undergrads and for other undergrad majors as well. This is a skill set, that obviously since most Fortune 500 companies use this type of software, it is a skill set that is very valuable for accountants and marketing folks and TLOG folks and other disciplines as well. If you complete the three classes that we offer, as part of a minor, or a concentration you can get an SAP approved certificate in this area as well, which is a very nice plus to put on your resume as you are hunting for a job.

Heather: That’s great!

Jeff: That opens up another career track too, consulting. If you like to travel and make some slightly better money than you are going to see in a normal industry hiring, than consulting is defiantly a route to consider.

Heather: That’s great, that’s good! Well is there anything else you would like to share with our listeners before we go today, that we haven’t discussed? How about if we have an undeclared student who would like to talk to one of you further, how would they contact you, through e-mail perhaps, would you mind sharing your e-mail addresses with us?

Jeff: Yeah, e-mail is great, my e-mail address is jmullins@walton.uark.edu.

Christine: My e-mail, Christine Davis, is cdavis@walton.uark.edu or you can come by 204 in the Walton College and you can ask to talk to either myself or Moez Limayem, who is the department head. And either of us would be glad to talk with you if you are interested in an ISYS major.

Heather: That’s great!

Eli: And for a student perspective, again I am Eli Bozeman at ebozema@uark.edu.

Heather: Well thank you all for being here and sharing this information with our students. We hope to get more ISYS majors, Thanks.