

## **Employer Needs Survey Form Institutional Summary**

Proposed Degree/Certificate Program: **“Blockchain Enterprise Systems Minor”**

Institution: University of Arkansas

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### **List names of employers responding to survey:**

ArcBest Technologies, Credera, IBM, iDatafy, JB-Hunt, Microsoft, Startup Junkie, Tyson Foods, Walmart, Zoom Solutions Inc.

### **List current job titles for the proposed degree/certificate program:**

- Software Developer
- Management Consultant
- Technology Consultant
- Software Engineer
- Product Owner
- IT Architect
- Technical Sales
- Data Scientist
- User Experience Designer
- Technology Account Managers, Evangelists, Global Blackbelt, Program Managers
- Developer Application
- Developer Emerging Technologies
- Technical Analyst
- Business Analyst
- Apprentice Blockchain Architect, Blockchain Architect
- Entrepreneur
- Intern
- Blockchain Engineer, Apprentice Blockchain Software Engineer
- Software Engineer, Technical Expert, Project Manager, Program Manager, Business Analyst
- Delivery Managers, Operation Engineers, Solution Sales

### **List the degree/certificate required for each job title:**

Computer Science/BS, Information Systems/BS&MS, Marketing/BS, Business Administration/BA, General Business/BS, Engineer or Marketing,

**Indicate number of current positions for each job title:**

<b>Positions</b>	<b>Number</b>
Software Developer	198
Management/Technology Consultant	46-56
Entrepreneur	2
Software Engineer	64
Intern	1
Product Owner	50
Technology Account Managers, Evangelists, Global Blackbelt, Program Managers	15
Developer Application	100
Developer Emerging Technologies	8
Technical Analyst	50
Business Analyst	100
Blockchain Architect	1
Blockchain Engineer	4
Software Developer, IT Architect, Business Analyst, Technical Sales, Data Scientist, User Experience Designer	1500
Software Engineer, Technical Expert, Project Manager, Program Manager, Business Analyst (Walmart)	>4000
Delivery Managers, Operation Engineers, Solution Sales (iDatafy)	Fill in next 3-6 months
<b>Total</b>	<b>&gt;6139</b>

**Indicate number of future positions for each job title:**

<b>Positions</b>	<b>Number</b>
Software Developer	25-50
Management/Technology Consultant	150-300
Software Engineer	200
Product Owner	15
Technology Account Managers, Evangelists, Global Blackbelt, Program Managers	15
Developer Application	250
Developer Emerging Technologies	
Technical Analyst	
Business Analyst	
Blockchain Architect	Zoom Solutions: hard to forecast
Blockchain Engineer	
Entrepreneur, Intern (Startup Junkie)	Unknown
Software developers/IT Architect	50-400+
Software Engineer, Technical Expert, Project Manager, Program Manager, Business Analyst (Walmart)	50
Delivery Managers, Operation Engineers, Solution Sales (iDatafy)	15-27
<b>Total</b>	<b>77-1307</b>

**Indicate salary for each job title:**

<b>Positions</b>	<b>Salary (\$)</b>
Software Developer	70,000-100,000
Management/Technology Consultant	60,000-65,000
Consultant & Entrepreneur	75,000-125,000
Intern	10-18/hour
Software Engineer	70,000-150,000
Product Owner	75,000-125,000
Technology Account Managers, Evangelists, Global Blackbelt, Program Managers	100,000
Developer Application	75,000
Developer Emerging Technologies	
Technical Analyst	
Business Analyst	
Blockchain Architect	Still working out (zoom solutions)
Blockchain Engineer	
Software Developer, IT Architect, Business Analyst, Technical Sales, Data Scientist, User Experience Designer	75,000-195,000
Software Engineer, Technical Expert, Project Manager, Program Manager, Business Analyst (Walmart)	60,000-150,000
Delivery Managers, Operation Engineers, Solution Sales	60,000-100,000

Indicate number of employers who gave preference for:

on-line/distance technology:   3  

evenings:   2  

weekends:   4  

at company site:   1  

**Indicate any type of support employers will give for support of the proposed degree/certificate program.**

<b>Company</b>	<b>Support</b>
ArcBest Technologies	50% tuition reimbursement
Credera	Internship, partnership, case studies
iDatafy	Internship and full-time opportunity
JB-Hunt	Adjunct sessions, guest lectures
Microsoft	Internships
Startup Junkie	Internships, part-time faculty, employee release time
Tyson Foods	Start-funds, internship, part-time faculty, tuition reimbursement, and equipment
Zoom Solutions	Internships and tuition reimbursement

**Summarize the skills needed for employment in the positions listed. (sample size: 10)**

- Interpersonal communications 9
- Written/oral communications 9
- Independent worker 8
- Planning/organizing 6
- Team work 9
- Supervision/management 2
- Analytical reasoning 10
- Leadership/initiative 7
- Problem solver 10
- Computer applications 7
- Budgeting 1
- Data analysis 6
- Conflict resolution 4
- Public speaking 4
- Computer programming 5
- PowerPoint presentations 4
- Marketing 1
- Teacher/trainer 1
- Other skills not listed: industry and domain background, Blockchain (Hyperledger fabric), Databases, XML, Messaging, Security, Cloud, Scripting, APIs/Swagger

**Summarize any additional information provided by prospective employers.**

- iDatafy: I highly encourage the U of A to add this proposed degree problem. We would want to interview just about every student that is looking to undertake this degree as we will have multiple job openings coming up soon. Please consider us an active partner for internship and full-time placement opportunities.
- Microsoft: 1) undergraduate: the biggest employer for this type of skill will be startups and technology solutions implementors. I do not see Microsoft as one of that kind, hence the low intake mentioned above. Also for entry into Microsoft openings for this field will require domain experience and background, which most probably be absent for fresh grads. However, Microsoft works closely with industry changes, shifts, partners, and is in our interest to help influence job opportunities or expansion of skillsets. As the use and adoption of blockchain grows, Microsoft will continue to feed into our partners, which will indirectly create more hiring opportunities. 2) opportunity – continuing education: such a course may be suitable for “continuing education” students. If this is offered for audience who are looking for a career change, and who already have background in domains – ex. Finance, supply chain, or such- this may be a more interesting value proposition.
- Tyson: As companies like Tyson Foods explore blockchain technology we are looking for qualified people. The speed that it is moving, and the infancy of the technology means there are really no people that are experts or have experience, so we will be looking to recent college grads to develop this new technology and explore what it has to offer in the business world. We are excited to be partners and help grow the community around the UofA Blockchain Center of Excellence and the degree programs they will enable.

- Walmart: We have the opinion Blockchain is in its infancy from a maturity perspective. It will continue to grow, mature, and increase in use in the next five years. It is very important we have adequate college level programs for this important disruptive change of technology.