

## ON-DEMAND COURSE - SYLLABUS

### **BLOCKCHAIN & BITCOIN INTENSIVE**

<b>Duration:</b>	10 Hours
<b>Delivery:</b>	Online On-Demand / Self-Paced Mentor Supported - 10 Hours
<b>Instructor(s):</b>	Bryant Nielson, Adi Ben-Ari, Kartik Natarajan
<b>Office Hours:</b>	10:00 AM to 6:00 PM Eastern Standard Time
<b>Email:</b>	studentsupport@blockchainhub360.com
<b>Prerequisites:</b>	None
<b>Continuing Education Units:</b>	1
<b>Microcredential Exam:</b>	Cryptocurrencies
<b>Certification Body:</b>	Blockchain Certification Association

#### **Course Overview:**

The Blockchain and Bitcoin Intensive course offers a deep look into the foundational blockchain concepts. Providing a deep and thorough understanding of the concepts that underpin how the world of blockchain works and gain a grasp of how mining works in the bitcoin world. The course to cover use cases in detail to really understand how cryptocurrencies work and why they work. Learn about new concepts like the DAO and the huge implications this technology has for the world.

#### **Course Composition:**

Online On-Demand:	Blockchain & Bitcoin Intensive	Modules 1 - 7
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#### **Learning Objectives:**

- Explore the origins of blockchain and understand how the technology will disrupt many industries
- Recognize Bitcoin and Ethereum as the Blockchain platform pioneers
- Comprehend and articulate the new world of DAO (Decentralized Autonomous Organizations)
- Examine digital currency and payments

#### **Demonstration of Learning Outcomes:**

At the conclusion of the Blockchain and Bitcoin Intensive course students will be able to understand and articulate the core concepts of DAOs and how cryptocurrencies and tokenization will not only alter the financial industry but also redefine how organizations conduct business.

**Evaluation:**

Evaluation is based on participation and a final exam.

Weighted:

50% participation

50% on the final grade

80% overall grade is required in order to receive a Certificate of Completion.

**Grading Policy:**

Pass or Fail. No Credit (NC).

**Attendance Requirements:**

Students are expected to complete all online self-paced modules and assessments. Certificate of Completion will not be issued until all online modules are complete, including the final exam.

**Student conduct and etiquette:**

Students will be expected to be courteous in their conduct and communications to the instructor and classmates at all times whether such conduct or communication is in person, by telephone or electronic communications.

Behavior that persistently or grossly interferes with instructor or other student activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. The instructor may require a student responsible for disruptive behavior to leave the learning environment pending discussion and resolution of the problem and may report a disruptive student to the Student Affairs Office

Note: Disruptions, or any other distraction in the learning environment may result in a failing grade.

**Course Evaluations**

Course evaluations and program surveys are important components of the educational process. Students are encouraged to complete the student course evaluation form issued at the conclusion of the course. The evaluation is anonymous.

**Computer/Information Literacy Expectations for Students enrolled in this class**

Students in this class are expected to:

1. Use a word processing program for writing assignments (e.g., Microsoft Word)
2. Be able to access assigned websites through the internet
3. Have access to PC or mobile device for participation in course content

## **Course Module Overview:**

### **BLOCKCHAIN & BITCOIN INTENSIVE – 7 MODULES**

#### **Module 1: Bitcoin Concepts**

Origins of Blockchain  
Cryptography  
Software and Networks  
Mining & Proof of Work

#### **Module 2: Technical Bitcoin Limitations**

Proof of Work  
Network and Hardware  
Transaction throughput, volumes and block size.

#### **Module 3: Bitcoin Limitations**

Mining and Incentives  
Merchant Acceptance  
Price volatility  
Mining costs

#### **Module 4: From Blockchain V1 to Blockchain V2**

Ethereum  
Proof Stake and Authority  
Smart Contracts and Sidechains

#### **Module 5: Blockchain as the New Database**

Decentralized Consensus  
The blockchain and blockchain services  
Smart Contracts and Smart Property

#### **Module 6: Blockchain V2 Use Cases**

Payments  
Colored Coins and Digital Assets  
Identity  
Smart Contracts, voting, land registry and Trade Finance

#### **Module 7: Preparing your firm for Blockchain**

Technology  
Private vs Public Blockchain  
Sidechains  
BaaS—Blockchain as a Service  
Decentralized applications and smart contracts  
Barriers to blockchain adoption  
Industry collaboration  
Creating a blockchain ecosystem