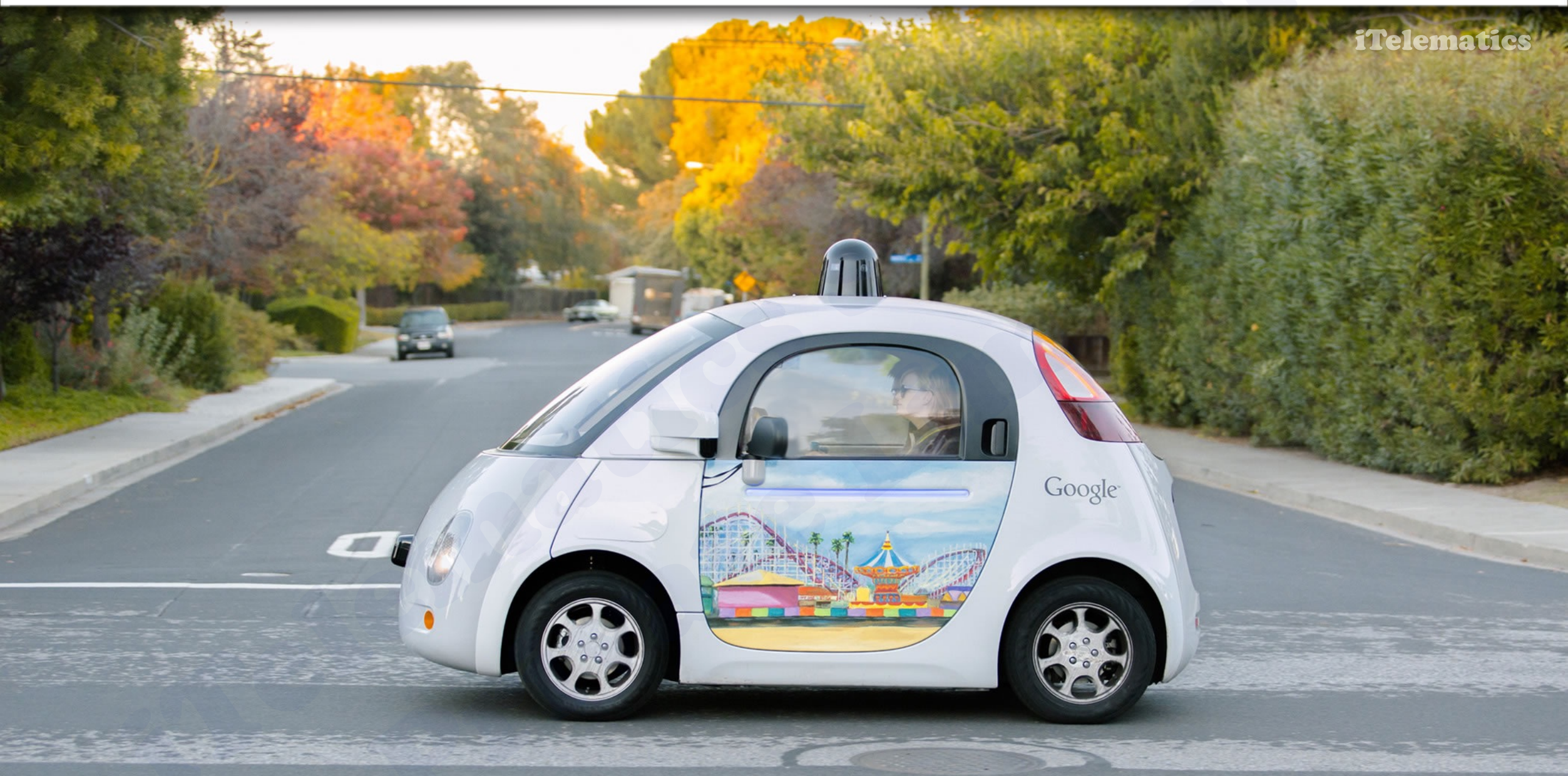
iTelematics®



iTelematics Software Private Limited

Courtesy: https://www.google.com/selfdrivingcar/paint/

Agenda

- About us
- Technology Research
- Telematics Certification Program
- Syllabus - Level T1, T2, T3, T4, T5
- Internship Project Details
- Research Deliverables & Evaluation Criteria
- Pricing | Cost structure
- Contact us

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

About us

iTelematics Software Private Limited is a Bengaluru based company, currently carrying out **Research** and **Development** in Automotive Software -

- In-Vehicle communication
- Vehicle to Vehicle Communication

Partnership with Universities

- Academic / Start-up projects.
- Helping Researchers with their Patents and doctoral thesis.

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Technology Research

Telematics Engineering

Autonomous Vehicles | Security

Software Engineering | Internet of Things

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Telematics Certification Program

Entry level programs (2 to 12 months Internship)

- T1: Freshers | Trainee | Intern
- T2: Software Engineer | Developers

Research programs

- T3: Telematics Engineer | Autonomous Car

Corporate level programs

- T4: Security Architect | Technical Lead
- T5: Product Manager

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Syllabus : Telematics Engineering

T1: Automotive Telematics Software

- Y1-Q1: Telematics Technologies & Platform
- Y1-Q2: Telematics Software Engineering
- Y1-Q3: Ethical CAR Hacking
- Y1-Q4: Automotive Security and Privacy
- Y1-E1: CAN Bus - Secure Programming

T2: Connected Vehicle Software

- Y2-Q1: Telematics Communication Technologies
- Y2-Q2: In-Vehicle & Vehicle to Vehicle Communication
- Y2-Q3: Vehicular ad hoc networks
- Y2-Q4: Connected Vehicle Security
- Y2-E1: Telematics Communication Protocols

T3: Autonomous Vehicles (AV)

- Y3-Q1: Driverless CAR Technologies
- Y3-Q2: Intelligent Transportation Systems
- Y3-Q3: Real time operating systems for AV.
- Y3-Q4: Autonomous Vehicle Security
- Y3-E1: Machine Learning & Artificial Intelligence

T4: Automotive Software Security

- Y4-Q1: Telematics Software Security
- Y4-Q2: Automotive Security and Privacy
- Y4-Q3: Connected Vehicle Security
- Y4-Q4: Automotive Cyber Security
- Y4-E1: Autonomous Vehicle Security

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Syllabus : Level - T5 (Product Management)

Wireless Vehicle Security

Domain :

- Automotive Software | Autonomous Vehicles | Security

Technologies :

- Google's Android Auto | Waymo
- Intel's Automated Driving Solutions
- Apple's CarPlay | iOS app development

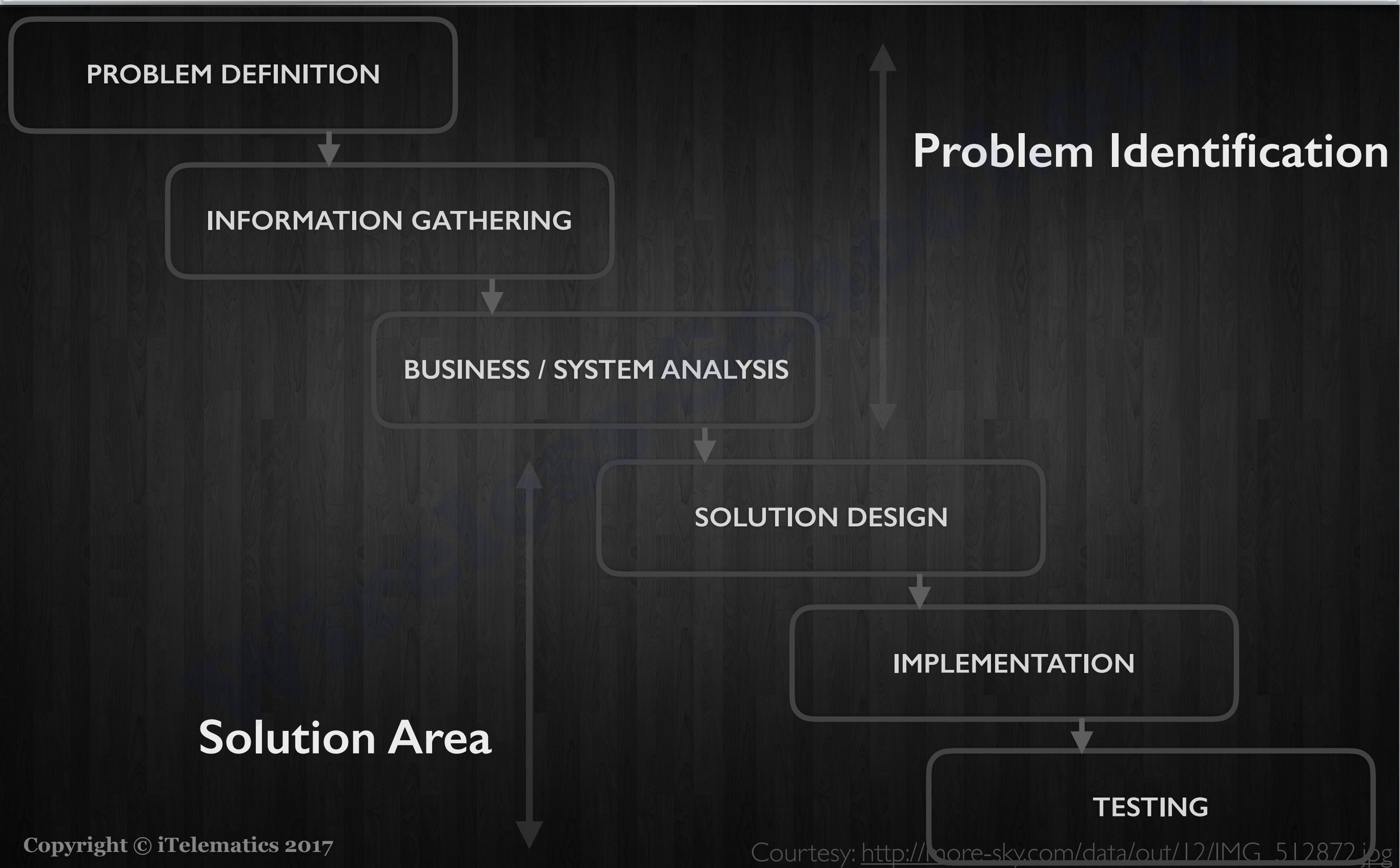
Tech - Entrepreneurship :

- Business Plan | Business Model Canvas | Agile | Lean Startup
- Trends & Predictions | Market Research
- Product Management | Monetisation models

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Telematics Software Engineering



Copyright © iTelematics 2017

Courtesy: http://moore-sky.com/data/out/12/IMG_512872.jpg

Internship Project Details

Copyright © iTelematics 2017

Course Name		Telematics Engineering
Specialisation	:	Automotive Software Security
Course Provider	:	iTelematics.org
Product	:	Wireless Vehicle Security
Problem to solve	:	[Contact info@iTelematics.com for more details]
Programming Language	:	[Java] or [Swift] (Prerequisites)
Platform	:	[Android] or [iOS]
Client and Server Technology	:	[Google] or [Intel] or [Apple]
Software Engineering Method	:	Object Oriented Software Engineering
Product Design	:	Unified Modeling Language
Development framework	:	Agile Scrum / Google's Design Sprint
Realtime IoT Devices	:	Wearables, smart phones (Emulators for development)
To be Delivered	:	Project Report, Presentation, working source code
Training and Evaluation Method	:	Online support using Skype call (Online Training) / Email Support
Project Guide/Mentors	:	One Professor from your college & One Telematics Expert / Architect
Internship duration (Basics)	:	2 Months (40 days * 7.5 hours = 300 hours) per student at College
Internship duration (Advanced)	:	6 Months * 4 semester = 2 Years = 1200 hours (2 Hours/Day) at College
Stipend	:	No stipend
Course Fees	:	Contact **info@iTelematics**.com for more details
Certification / Experience Letter	:	Provided on successful completion of the project

Courtesy: http://moresly.com/data/out/12/IMG_512872.jpg

Internship - Topics Covered

Copyright © iTelematics 2017

S.No	Topics covered	Descriptions
1	Introduction	Product Introduction and Software Engineering Concepts
2	Android/iOS Development (Client)	How to develop Mobile Telematics application for Internet of Things
3	Google Technology (Server)	Server development, Google Developer Portal and Playground
4	Research Domain	Internet of Things - Telematics Engineering
5	Development Framework	Agile Scrum / Google's Design Sprint
6	Project Definition	Problem statements, goals, boundaries, timelines etc
7	Information Gathering	Requirement Analysis, Interviews … etc
8	Unified Modeling Language	Usecases, Class, Object, Sequence, Activity diagrams … etc
9	Object Oriented Analysis	Learn and Apply Object Oriented Analysis concepts
10	Object Oriented Design	Learn and Apply Object Oriented Design concepts
11	Database Design	Designing database - SQLite, Big Data, Cloud storage etc
12	Design Patterns	Learn algorithm, data structure, design patterns
13	Wireframe / UI Design	User experience design, wireframes, CXD, Personas
14	Prototype Evaluation	Proof of concept - Design & Implementation of prototype
15	Server side development	Server side development
16	Client side development	Client side development
17	Code Review and Dev Testing	Unit testing, Static analysis, Automation tools, Memory leaks
18	Quality Assurance	Integration Testing, Product testing, Performance testing
19	Application Release	How to submit the app to Google Play / Apple's AppStore
20	Project submission	Submit the open source code, presentation and project report

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Telematics Research | Business Model

- Job Requirements
- Software Development Kits
- Research / PoC Requirements
- Government project requirements

Key Partners :

Automotive

Software Development Companies

Key Resources:

- Subject Matter Experts

Key Activities:

- Research / Internship
- Analysis & Design | PoC (SME)

Key Deliverables:

- POC / Prototypes
- Research reports

iTelematics®

.org

- Developers
- Architects
- Product Owners

- PoC / Prototypes
- Research reports

Key Partners :

Universities

Educational Institutes

Key Customers :

Students & Professors

Start-ups

- Patents
- Intellectual Properties
- Research Papers

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Evaluation Criteria (Option - Traditional)

- Hackathon
- Mini Projects
- Group discussion
- Tech Talk | Paper Presentation
- Technical Quiz | Interview Questions

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Evaluation Criteria - Part 1

- Team work & Collaboration
- Unlearn & Learn
- Quality of the work done
- Self Discipline & Self Motivation
- Specialisation in one area

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Evaluation Criteria - Part 2

- Time Management
- The ability to Identify the problem
- The ability to solve the problem
- The ability to deal with failures
- Leadership & Start-up skills

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

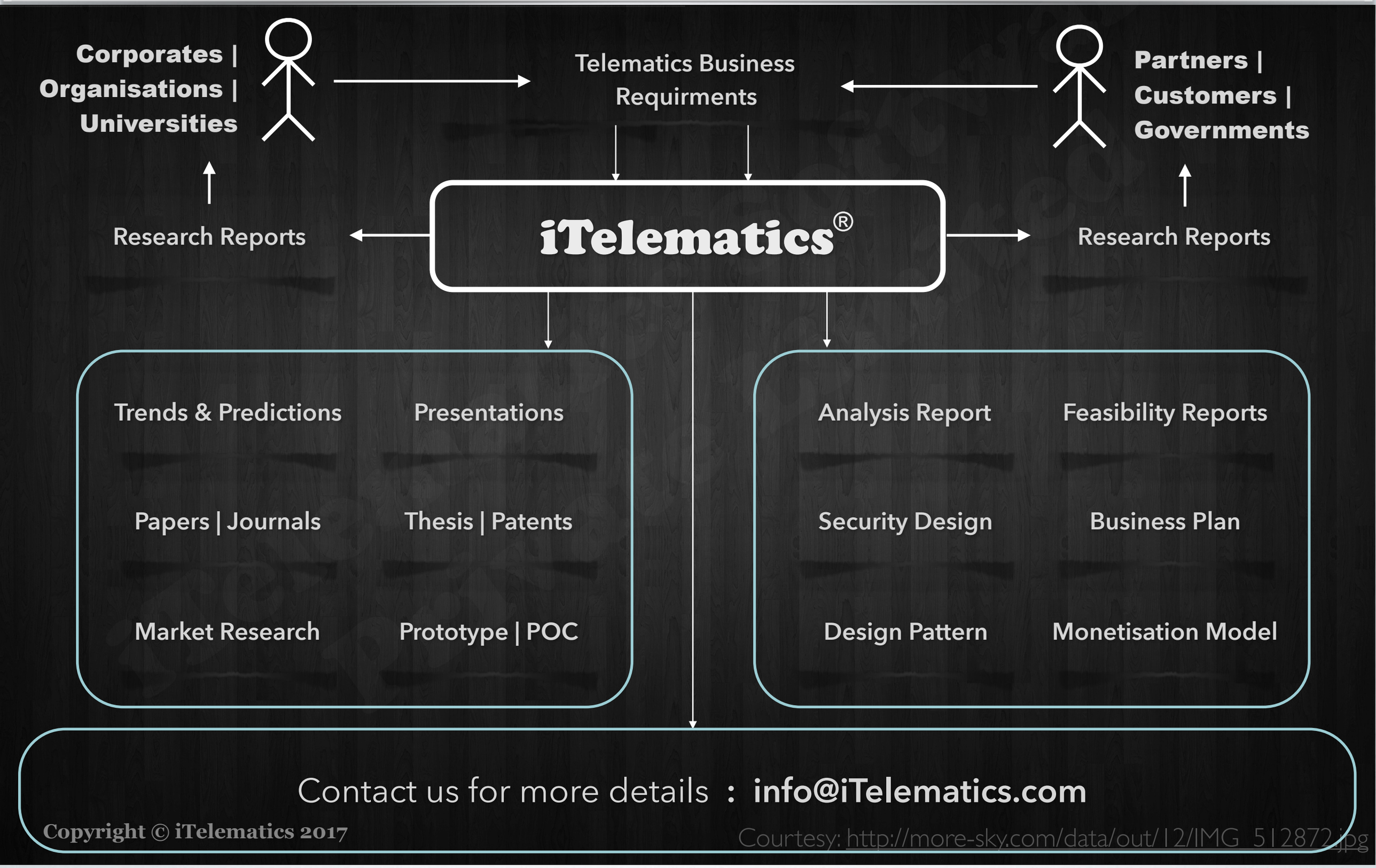
Course Completion Certificate

- Awarded after successful completion of each course.
  - Course Completion Certificate
  - Grade | Score card : After evaluation
    - ✓ A : 81% - 100%
    - ✓ B : 71% - 80%
    - ✓ C : 60% - 70%

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Research Deliverables



Contact us for more details : **info@iTelematics.com**

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Pricing | Mentoring Fees

	Total Units	Plan / User
Level - T1	5	$99/Unit
Level - T2	5	$199/Unit
Level - T3	5	$299/Unit
Level - T4	5	$399/Unit
Level - T5 | Start-ups	Contact us	Contact us
T1 + Internship 2 to 24 months at college campus	Start-up @ College	$99/Month
Research Papers | Patents | PoCs	Contact us	info@iTelematics.com

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

Contact us

ASHWINI SUDARSHANA

- Co-founder, iTelematics Software Private Limited
- Research - Intelligent Transportation Systems
- iOS and Android app development for Internet of Things
- Working in planning and designing smart cities, smart transportation and vehicle telematics solutions
- Profile: https://www.linkedin.com/in/ashwinisudarshana

info@iTelematics.com

Copyright © iTelematics 2017

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg

iTelematics®

"Thank You"

"Dreams are not what you see in sleep.
Dreams are which does not let you sleep."

- A.P.J. Abdul Kalam

Courtesy: http://more-sky.com/data/out/12/IMG_512872.jpg