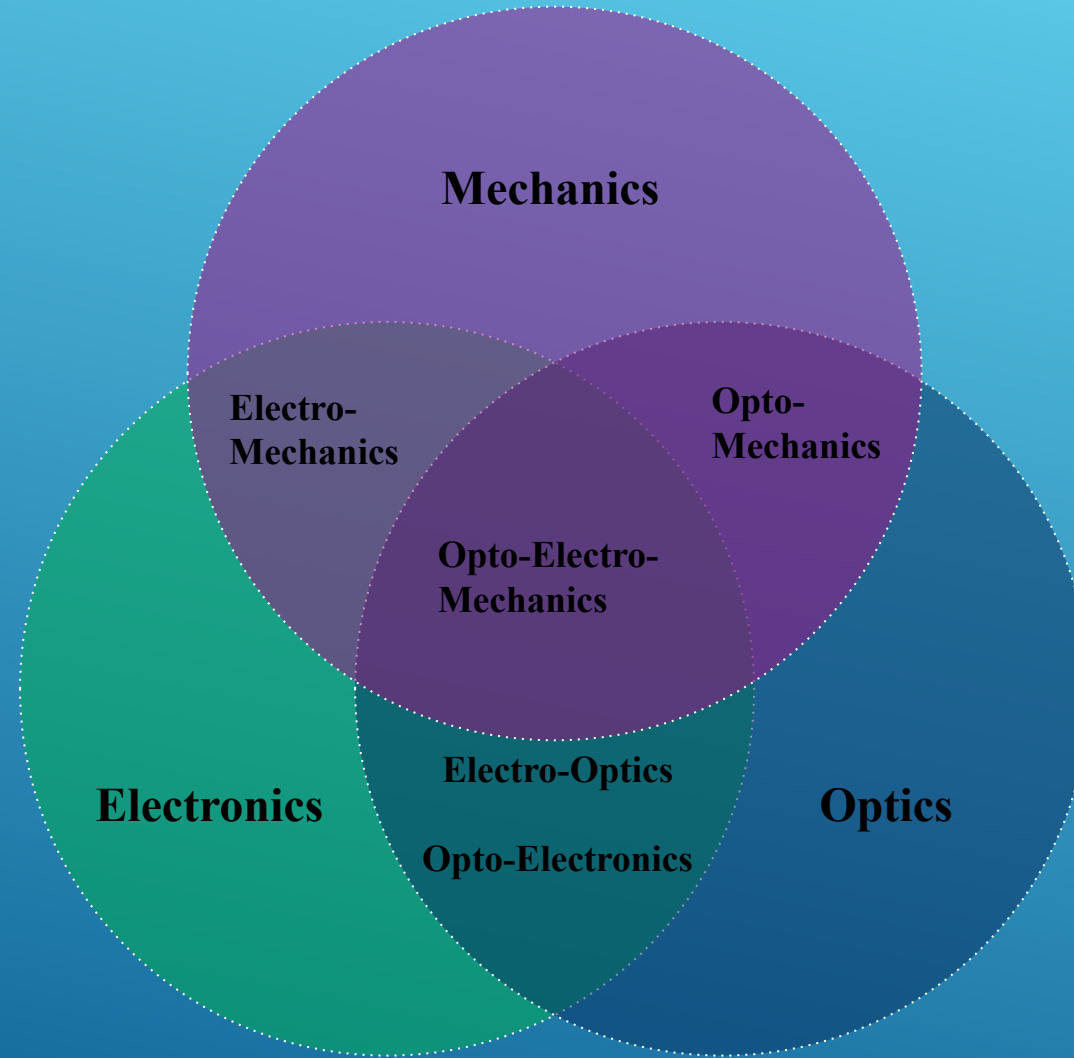


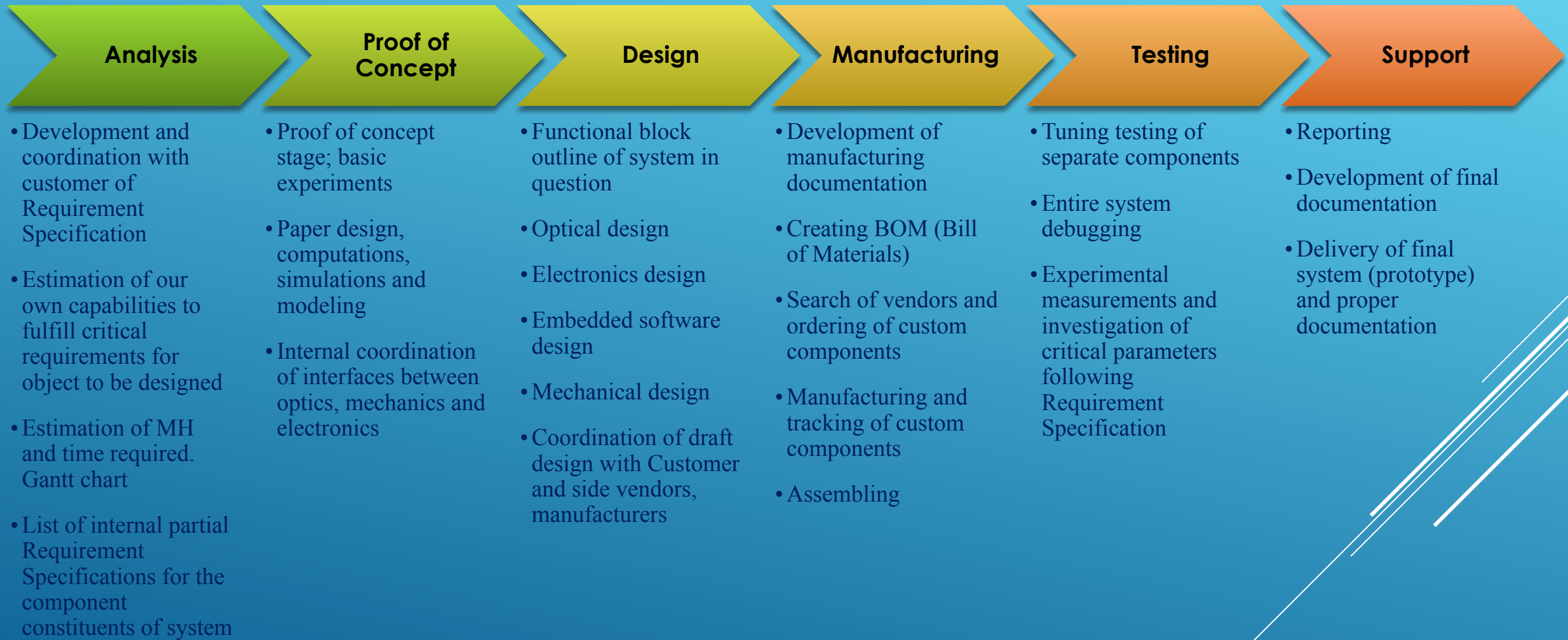
DEVELOPMENT ROAD MAP AND DESIGN MEANS



Our Research And Development Capabilities



Hardware Development Life Cycle



Hardware and software development means

▶ **Analysis, simulations, calculations:**

- ▶ Monte Carlo simulation; Statistical analysis; DSP and Image Processing Algorithm development; Mathematical modeling and optimization of different physical processes (optics, thermodynamics, magneto statics)
- ▶ **Software:** Mathcad, Matlab, Python, SolidWorks Simulations

▶ **Optics:**

- ▶ Optical computations; Test image synthesis and analysis
- ▶ **Software:** Zemax

▶ **Electronics:**

- ▶ Analog circuit design, digital circuit design, PCB design, simulation.
- ▶ Engineering Prototype, experimental design of verification tests
- ▶ **Software:** Altium, Cadence

▶ **Mechanics:**

- ▶ 3D modeling, design aided assemblies, performing of research and assembly works, calculation of load, development and optimization of technological way for detail processing, development of design documentation
- ▶ **Software:** SolidWorks, Inventor, AutoCAD, MasterCAM

▶ **Software/Firmware design:**

- ▶ Programming languages: C, C++, C#, VB.NET, VBA, Python
- ▶ IDE's: Keil, Visual Studio, Eclipse C/C++, Altera Quartus II, MySQL Workbench
- ▶ Technologies: Computer / Machine Vision, Machine Learning (OpenCV, TensorFlow, Scikit Learn)
- ▶ Control version: SVN, Git
- ▶ Platforms for embedded systems: ARM, X86
- ▶ Microcontrollers (STM, Atmel, NXP, Cypress, ADUC)
- ▶ FPGA, CPLD (Altera)
- ▶ OS's: NoOS, Windows, Linux, QNX