# FERCHAU Model

#### **Process and project** management

- aSPICE & ISO 26262 compliant
- Requirements engineering and management Quality management/quality assurance •

**Product** definition

> **Product** requirements analysis

Product sign-off test

**Product integration &** calibration

#### Prototype workshop and testing

- Complete vehicle High-voltage assembly and conversion Vehicle validation and ADAS testing
- Vehicle management Metrology
- Testing (e.g. driving
- dynamics, driving comfort) Emissions tests (operator

model)

# System and function development

- System requirements and architecture Modelling and simulation •
- Function and controller design Code generation (prototype and series)
- Topology, communication, connectivity

System requirements analysis

> System architecture design

System sign-off test

System integration & calibration

### Diagnosis and data management

- Diagnosis concept development, implementation and
- testing (on-board, off-board) After-sales data analysis

#### System and function validation

- HIL test bench development and setup
- Test automation and operation HV battery test centre (operator model)

#### Wiring system and component development

- Requirements Design and construction •
- Sound development Calculation and simulation

Mechanical requirements analysis E/E requirements analysis & design

Mechanical design



#### Wiring harness development and manufacturing

- Small batch production Prototype setups
- Breakout box, adapter Rapid prototyping

#### **Component validation**

- Release testing on the test bench
- Environmental chambers for components
- Acoustics hall

#### **Embedded software** development

- Software architecture design, detailed design, unit test and integration
  - Full-stack embedded (BSW, Middle Layer, application in AUTOSAR) Embedded Linux applications •

## schematics, layout diagrams Mechanical component test Mechanical detailing Software implementation Electric/ electronic component production

#### IT software development

- HMI & mobile apps
- Continuous integration
- Storage and connection Data science & Al
- Cyber security

Connecting People and Technologies for the Next Level