



STRUCTURAL ANALYSIS

The Structural Analysis Department is principally responsible for defining and achieving structural performance targets through exploiting first principles & CAE techniques.

Structural Analysis works closely with all departments from the programme outset to ensure the package is protected for legislative requirements in addition to ensuring the customers attribute targets can be achieved. A summary of the core competencies offered by the function are:

- Structural performance target setting, innovation, and development
- iStream[®] material characterisation programs
- Component & sub-system correlation programs
- Component stress analysis
- Light-weighting and optimisation analysis
- Static and dynamic stiffness analysis
- Crash structure design and development
- Development of bonding and mechanical attachment strategies
- Crashworthiness and impact analysis – vehicle test and analysis programs
- Occupant and pedestrian assessments & analysis

Future advancements within the department will see Structural Analysis work closer with the vehicle dynamics function to optimise the durability and fatigue performance of iStream[®] architecture. It is also the intention to work closer with technical partners in order to become an industry leader in the virtual modelling of HV battery systems reliably predicting their performance in crash events.