

Forward Features List 2019

The features below reflect subjects that will be covered within the issues named. Below that is a list of subjects that are being actively researched with a view to inclusion in CAD User when they become topical, or interesting.

January/February

BIM – An assessment of where we stand – and what's next.

CFM analysis in Building Design

3D Printing for the architect

Reality modelling technologies

On-site Mobile Applications

Structural Engineering Design

ERP – Information Modelling

March/April

BIM in the Cloud

Virtual Creation of 3D models – 3D scanning, LIDAR, Digital photo assemblage

ERP – Liability and Risk Mitigation

Concrete Design and Analysis

FIM – Fabrication Information Management – Off-site Manufacturing

Stormwater modelling, Drainage systems, Flood risks etc

Project Planning – What's new?

May/June

Infrastructure projects – Rail, Road
Finite Element Analysis in Structural Design
BIM Model Viewers
Collaboration and model data exchange standards
Engineering Change Management technologies
ERP – Finance, Budgets, Opex and Capex
Health & Safety/Risk Management

July/August

Rendering and Visualisation - the State of the Art
Building Performance Evaluation and other Environmental Issues
Power Generation and Distribution – Traditional and Renewables
Education and Training within the Construction industry=try
Project Accounting and Contract Handling
Wide Format CAD and Multifunction Printers
ERP – Resource and Supply Management Issues

September/October

Structural Design/Detailing and Fabrication
Wide Format Scanning technologies – Archiving construction documents
Security Issues on the Construction Site and Employee Evaluation
Construction Simulation – 4D and 5D simulation.
FM – Software and Cloud options
COBie and its impact on Asset Maintenance and Performance

ERP – Human Resource Management

November/December

3D Design – Free-form modelling, Generative Design, Rhino and other 3rd party tools

GIS, CAD and other terrain development tools.

Utilities – Water/Electricity/Gas – Asset Management

Landscaping and Concept Design, Mass modelling techniques and Urban Planning

Budget CAD and Architectural Design Software

Compliance Issues and Standards

ERP – The Bottom Line

The following AEC and Civil Engineering subjects are continually under review

Architectural design solutions

Collaboration Software tools

Facilities Management

Civil Engineering

Environmental Analysis

BIM under Government Guidance

Process Plant design

Bridge Design

Flood Defences

Utilities and Power Grids

Hardware for CAD applications that will be reviewed from time to time will include:

Wide Format Printers

Workstations

3D Scanners

Display units

Graphics Cards,

Mobile Computing Devices

Drones and other data capture devices

The Internet of Things